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American Mutual Seed Co.


HEADQUARTERS FOR

GRASS and FIELD SEEDS

SELLING AT LOWEST WHOLESALE PRICES
OUR CUSTOMERS SHARE IN THE PROFITS

43RD. & ROBESY STS.
CHICAGO. ILLINOIS

**SEED GUIDE-SEASON 1921
AND SPRING 1922**



CANE PRODUCES BIG CROPS OF FORAGE



IOWA-103-THE CHAMPION EARLY OATS MAKING 100 BU PER ACRE

OUR SEEDS SAVE THE BUYER MONEY AND PRODUCE BIGGER AND BETTER CROPS



BUY AS A UNIT—NOT AS A SINGLE BUYER

GET BETTER SEEDS
LOWEST PRICES

**Form a MUTUAL CLUB in your own neighborhood.
It is a business proposition, to save money and make money.**

How about you and your neighbors "getting together" this year to buy all your seeds on a quantity price basis. Right in your own midst you have a "buying power" at your command which if put to use will save money for all of you. "Buying power" means the combining in strength of money and men to buy jointly at best advantage. You have this power. Why not use it?

Around you are numbers of neighbors and friends who will buy seeds just the same as you. As individuals in a "MUTUAL CLUB" and combine your buying power?

Local co-operative buying enables you a group to buy quantities, and you get quantity prices. Your combined united strength as a buying unit gives you a wonderful advantage.

"In union there is strength" means something when it is applied to your seed buying. It is reasonable to believe that ten of you together can buy better than ten of you alone. "Buying power"—the combination of money and men—commands lowest prices. You know this. That's why the mail order houses buy so cheap to sell cheap—because they have the buying power. Now why don't you get together as farmers to likewise buy your seeds as cheap as you can get them.

For several seasons past, this Club idea of buying seeds has grown immensely with our customers. It sprang up like a weed. It grew. Some of our shrewdest customers took advantage of the chance to save money and get the best seeds. It happens to be a good idea, and we are going to encourage it.

We ask you to start a **MUTUAL CLUB** in your vicinity, a Club to combine buying power as far as Field and Grass seeds are concerned. We are going to help you, and you will profit by it. We know this. Common business sense tells us so. Certainly a group of you can buy in quantity cheaper than one of you can buy alone.

Here's How We Are Going To Help You:

You'll find an order blank sent with this catalog on the back of which you will write the names and addresses of your friends and neighbors. We will send every one of them our descriptive catalog and planting guide.

This will help them wonderfully in finding out what to plant and how to plant it. None of us are too wise to learn. The seed guide of today is a wonderful help to the farmer who wants the most from his soil. So our Seed Guide will help.

And on the bottom of this list you'll sign your own name, which will guide us in quoting you **MUTUAL CLUB** prices. Of course these prices are lower than usual because they are quantity prices. It is unreasonable to expect them on small lots.

After your neighbors receive their catalogs, make up a list of your combined requirements, send it to us for our **MUTUAL CLUB** quotation and you'll certainly notice the savings you can make through buying in quantity on the group plan. Your combined buying power will bring you the thing you are entitled to—quantity prices.

Here is the Result:

Through your buying in quantities, you can afford to buy the best standard grades of seeds at a price sometimes lower than so-called bargains of poor quality. You will get seeds that insure a far greater yield and still better profit. You will save time in the way of getting your tests and your orders through. You will profit in more ways than one, if you'll group yourselves into a **MUTUAL CLUB** for buying power.

Right in your own hands you have the opportunity to make this saving. It requires no extra time or effort when you all work together. Do it. Start it today. Send in your names on the back of the order blank. There is no obligation. We make no mention of your name when we send the Catalogs. Just as soon as we get your list we will begin to work with you, and you'll sure find us on the job.

This combined buying plan is an old idea that makes good, and it is needed in these days of co-operation more than ever before. Do your part and send in your list today. To insure quick action, mail it personally to Mr. Summers.

All **MUTUAL CLUB** orders will go through his office to insure satisfaction and personal attention.

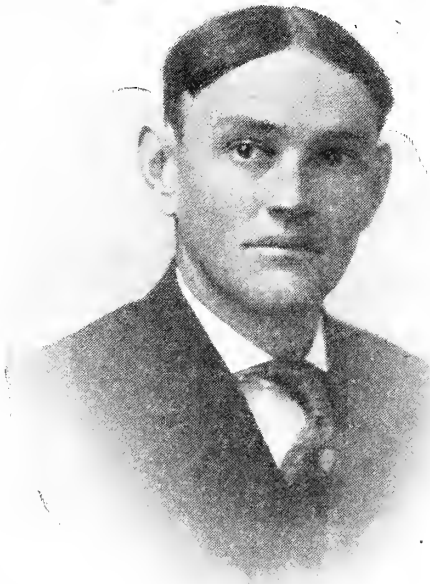
LOW PRICES AND SERVICE FROM THE GREAT CENTRAL MARKET

Dear Friends:—We feel that we cannot impress upon you too much the advantage of placing your seed order in Chicago. Every point in the country is in direct connection with the 26 big railroads that leave Chicago. This splendid shipping arrangement helps us make prompt shipments. Do not hesitate, friends, to send us your orders. If anyone in the United States can give you service we feel that we can. If you have ever visited the Stock Yards in Chicago, then you have some idea of the facilities that we have at our command to give you service.

I know that it is not necessary for me to tell you old customers why the American Mutual Seed Company can furnish you reliable seed or why they can save you money on them, but for the benefit of the new customers I wish to say that I know it will be a big benefit to you to make us your seedsmen. Our good seeds and our modern business methods will, one year with another, make you a lot of money. We are aggressive operators and our men cover the principal seed producing sections of the country, enabling us to secure our seed stock from these sections where the best seed is grown. On account of the large volume of business that we handle, we are at all times in a position to make you as reasonable prices, quality considered, as you can secure.

We feel that we are this year in a position to serve you on your seed requirements better than ever before. Now that conditions are back to normal and the railroads are looking for business instead of your having to beg them to handle it, they are giving real service. Freight shipments go through quicker at this time than express shipments did during the war. When you put a tracer on a shipment nowadays, they look it up. Chicago being a big competitive point, all roads are now anxious to give service and get the business. That's why, friends, we are able to give you better service than you are able to secure elsewhere. Give us your order and be convinced of the way that we can serve you. I only wish that I could impress upon you the advantages of buying your seed supply early. The early buyer has the advantage in that he not only is usually able to save money, but he insures himself by having his seed on hand when he wants to use it. Another advantage in buying your seed early is that the best qualities usually move first and you have the advantage of securing the pick of the stock.

I feel that present conditions give you an exceptional opportunity to sow a liberal acreage of grass



J. F. SUMMERS
Manager American Mutual Seed Co.

seed at a very low cost. Seed is selling today at prices much below the cost of production. Growers have been compelled to sell their seed in order to raise money, at prices less than it cost them to produce the crop. Last fall when the crop moved, money in the terminal markets was hard to get, which fact kept many buyers out of the market. This all had a tendency to lower prices. As we were in a position last fall to take advantage of these low prices, we are giving you the benefit of our favorable purchases. I want to urge upon you to sow what grass seed you think you should this year. Nothing pays better than to keep a liberal acreage of your farm in Clovers and Grasses. It doesn't pay to put land in a cultivated crop that needs clover or grasses. Keep rotating your crops and you will make money in spite of low prices. The lower prices get,

the more necessary it is to keep your land up to a greater production per acre.

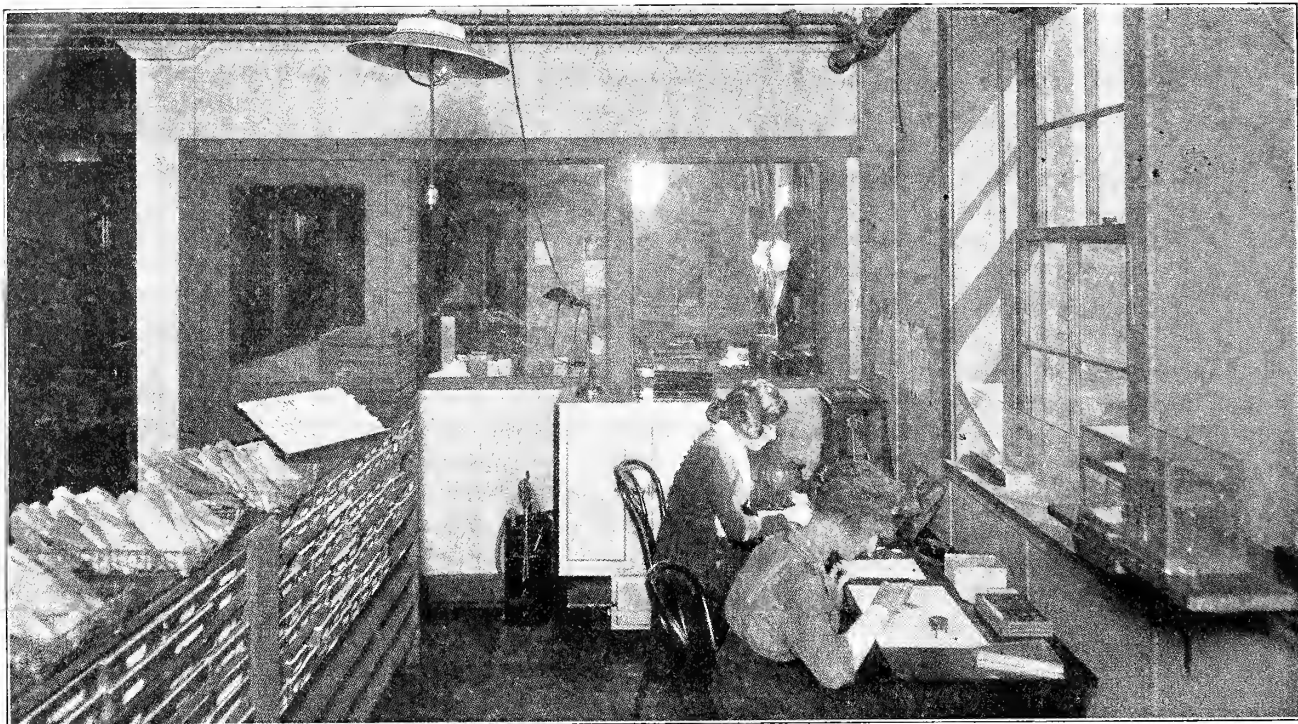
Our Green List that we are enclosing is based on the current market and we protect you on the price. We do not publish our price lists months ahead, as some do, but give you the advantage of the market at all times. Be sure and get latest prices at all times. We publish a new list every ten days.

Making a specialty as we do of Field and Grass Seeds, makes it possible for us to give your seed requirements, in this the most important branch of the farmers' business, better attention than those who devote the major portion of their time to other classes of seed, expending all our energy on Field and Grass seeds enables us to furnish you those varieties that will give you the best results in your locality and to procure them for you at much less money than those who do not give this branch of their business their undivided attention.

Friends, I want to assure you of my hearty co-operation in every way possible to help you produce bigger and better crops. I am here to serve you in every way that I can and you will always find me on the job six long days every week, using every effort to see that you get the best seed your money can buy and crowding every department to see that your order goes out promptly.

Friends, I want your business and I feel that no firm in existence today can offer you the inducements, quality of seed, low prices, reasonable freight rates and courteous treatment that you can secure from the American Mutual Seed Company. Give us a trial and be convinced.

Sincerely yours, J. F. SUMMERS.



Our Modern Seed Testing Laboratory

A Big Volume on a Small Profit Makes It Possible to Sell You The Best Quality For The Least Money

The enormous volume of business that we do, we feel, enables us to give you service on your seed purchase that you cannot secure from other sources. Farmers in every state in the Union are buying their entire seed supply from us not only because they save money, but because the seeds we send them produce the results. There is no guess work when you secure your seeds from us. Every lot is shipped subject to our Absolute Guarantee to satisfy you in every way or we refund your money.

Our Shipping Tag Gives You the Purity and Germination

Our shipping department has instructions to place a tag on every bag of seed shipped showing the purity and germination. This tag is in itself a guarantee of fair dealing. You do not need to be a seed expert to purchase your seed from us. We are in a position to furnish you with full information regarding your seed, and stand ready to back up any statements made regarding our seed by our Absolute Guarantee. If this tag should be lost off your shipment in transit or for some reason not give you full information regarding the seed, our seed analyst will gladly furnish you this information upon request.

Services of Our Testing Laboratory at Your Disposal

We maintain at a big expense a complete testing laboratory equipped with the most modern seed testing appa-

ratus. This laboratory is in charge of an expert seed analyst whose services are at your disposal. We want you to feel free to ask them for any information you may want regarding any seed you sow. Our seed testing laboratory, we feel, is a real service to our customers that they cannot secure from other sources. Remember this laboratory is maintained at our expense for your benefit and we maintain it not only to protect you on the seed you buy, but we want it to be a real Service Bureau for you, and we want you to feel free to call upon those in charge for any information you may wish.

Get Our Free Samples Before You Buy

When you are in the market for seeds write us. We will send you identical samples of the seed that we will furnish you and quote you close prices on the same. All we ask is an opportunity to show you what wonderful values we can offer you. We want you to compare our prices and samples with what others are offering. Give us a chance to show you how we can save you money on your seed order is all we ask. We conscientiously believe that we can offer you greater value for less money than any other firm. We leave the matter entirely with you as to the value of the seed we ship you. If you do not feel after receiving the seed that it is worth more than you paid for it, return it to us and we refund your money. Could anything be more fair?

An Unconditional Guarantee with Every Order

Here is an Absolute Guarantee to satisfy you completely, or refund your money and all of the freight charges you have paid on seeds from this firm. You are protected when you buy from this firm.

MONEY BACK GUARANTEE

We hereby guarantee the seeds sent the bearer to be just as represented. If the seeds are not entirely satisfactory on arrival and you do not feel that they are worth more than you paid for them, you can return them at our expense and we will refund your money and any freight charges you have paid.

We cannot guarantee crops, as that is part our control, owing to the climatic conditions, accidents and unusual contingencies that occasionally occur; but we give you 30 days to test our seed in any way you wish which fully protects you on your seed purchase.

AMERICAN MUTUAL SEED COMPANY

CHICAGO,
ILLINOIS

Per

J. H. Sumner

A guarantee like this is proof of fair trading. We could not give it if our goods were not reliable

We always endeavor to send our customers the best seed it is possible to buy for the money. We guarantee unconditionally that the seed will satisfy you. If the seed is not satisfactory you may return it to us and we will refund your money and any freight charges you have paid. No questions asked. We stand behind every pound of seed that we put out. It must please you or we are not satisfied. A guarantee goes with every shipment we make you. It's good for the full amount of your order. Can anything be more fair?



It's the Breed That Tells the Tale Quality Wins



He who breeds best gets most—in cash. It is the high bred stock that wins in the showing and pays on the farm. It is class and quality that brings first money—big money. Therefore class and quality are worth while. Especially when they bring best returns. Folks have come to realize this and now they breed up. Matters not whether they are in for goats or cows or crops or birds. They know the best brings the most—the breed tells the tale.

And it's the law of survival of the fittest that tells men to go in for quality. It makes some folks richer than their brothers in the city and some men more prosperous than others on the farm.

In these days—even the best is not good enough—and men are striving constantly, with brains and money, to make what we now call good, better, and from there on up.

There is no more noticeable examples of this effort to improve things than can be found in the work of the American Mutual Seed Company. We put quality uppermost. Breed in seed means much to us. Varieties are constantly being studied to find either their shortcomings or their good points. And the result of this scientific research goes out to our many thousands of customers all over the country.

You may not appreciate the fact that every bag of seed you buy from this concern has been measured for its productive value to the farmer. Through our great distributing power many good varieties are sold at prices comparing favorably with seeds not so good in quality.

When you buy from the American Mutual Seed Com-

pany—you get seeds that should, under favorable soil conditions, give you a yield that will pay well for your labor and investment.

The two ways to judge the "breed" of a seed concern is by the word of the man who has bought and by your own actual test and use of the seed.

The word of your friends is published elsewhere in this catalogue—they say "we bought and are satisfied."

The actual test is ready for you now. We say elsewhere in this catalogue—"buy—test them and be convinced. Then only, are the seeds your property. If not up to what you expect—send them back and get your money."

Do not let this fact escape your mind. In nature—like begets like—good seeds yield crops equally as good—the inferior seeds produce poor crops. It will not pay you to start with seeds of poor quality.

And remember—the American Mutual Seed Company does and will continue to gather in the best available. It guarantees these seeds subject to its formal and standing guarantee—and they must pass your test or back they come. Do not confuse the low prices quoted by us with the quality. We aim to undersell—that's why we are lower. Our price list shows the grade. Elsewhere in this catalogue the grades are plainly described. Make your choice—and you'll find your money's worth in every bag you buy, seeds of high type. And like the better stock—they'll yield because they are better.

Play safe—buy your seeds from the American Mutual Seed Company—specialists in Field and Grass Seeds.

What Location Means

An Ohio farmer was recently asked by a city chap, "Why did you folks set that big elevator down in that hollow when you could have set it up high and dry on that hill over there?" "She's down there right at the crossing of those two great railroads," was the answer.

And that's a good point. Some folks say, "Why go to Chicago to buy seeds when you can buy them in the country?" We answer, "Because Chicago is the center of distribution by mail." It has its advantages just like the elevator next to the tracks. For the American Mutual Seed Company to set up its great cleaning machinery and other facilities away from the center of distribution would be like setting the elevator away up on the hill.

Just like all of the other big mail order houses and packers—the American Mutual Seed Company is located in Chicago on account of the superior handling facilities that enable it to gather raw seeds from every available point, clean, and distribute them to every point at lowest handling charges.

Abundance of help of all kind in Chicago enables us to handle a big business economically. Sometimes big forces are needed—and transient help is obtainable. When the need is over this help is laid off to find work elsewhere. This means a big saving in a big business as we have no big crew to carry through the dull season.

The American Mutual Seed Company located its gigantic seed cleaning and distributing plant in Chicago because of these handling and shipping facilities that are necessary for a big business. The advantages are reflected by our low prices—our low price policy is the big thing you are interested in.

The service is the best without doubt. From the early canal and towpath transportation has woven a gigantic



network of tracks from all sections right to the door of the packer and mail order house and right to the door of the American Mutual Seed Company.

This all means something to you, but the advantage is not visible. Its loss is felt only when you do not take advantage of the service offered you. The farmers who do buy here, know what they can get, how quick they can get it, and how much they can save. That's why they buy in Chicago year in and year out.

Others are beginning to buy here, too—all of which goes to show that Chicago is the Mail Order Center—and likewise the center at which to buy good seeds and save a lot of money through low prices and better crops.

Chicago has its superior advantages for mail order buyers. The American Mutual Seed Company offers these advantages for mail order seed buyers.

HUBAM

The Great Annual White Sweet Clover Grows from 3 to 7 Feet High in One Season

The discovery of Hubam, the Sensational Annual White Sweet Clover is becoming recognized as one of the world's great agricultural achievements. No crop has ever gained such favorable recognition in so short a time as has this one. Many leading agriculturists believe it will revolutionize the crop rotation and producing power of the soil.

Hubam is an Annual. It reaches its full maturity in from 3 to 7 months from the time of planting. On account of its being an Annual it saves one year in the crop rotation, as a crop can be harvested the same year after planting. This clover is practically identical to the Biennial White Blossom Sweet Clover. It has the same habits and characteristics.

Hubam a Big Money Crop

There is going to be enormous demand for this Seed for the next few years, and we know of no other crop that will make you the money that growing Hubam for Seed will. One Seed grower last year sold \$6,000 worth of Seed from a single acre. While we expect the seed to sell for less money next year than it does this year, we feel that the demand that exists will keep prices high for several years.

We feel that you will make no mistake in getting a stock of this Seed this year. Then next year you will have Seed enough for a large acreage. This wonderful crop is indorsed by practically every county agent, Agricultural College and Farm Paper in the country. Grow the crop that is being advertised and secure the benefits of this publicity.

Hubam an Easy Crop to Grow

Hubam can be grown on practically any soil. It is much easier to get a stand of than Clover. Due to the fact that the Crop Matures the Same Season you take no chances with it winter killing, but are sure of a crop. Hubam, like the Biennial White Blossom Sweet Clover, will withstand more dry weather than any other Clover.

Supply of Hubam Seed Very Small

The demand for Hubam Seed is very heavy and the supply is very small, as there are only a few hundred acres being grown this year. There will not be half enough seed to supply the demand this year, so if you decide to grow Hubam Seed send us your order as early as possible, so you will not be disappointed in getting your Seed Supply. We have 100 acres of this Seed and that is all we will be able to get, so when this Seed is gone we will have no more until another crop. Our advice is place your order now for Hubam Seed while we can furnish you contract grown Seed.

Scarifying the Seed Very Important

Sow nothing but Scarified Hubam. Be sure that the Seed you sow has been Scarified. Hubam, like the Biennial White Blossom Sweet Clover, will not germinate unless the Seed has been Scarified. This increases the germination qualities of the Seed from 40 to 60 per cent, and nothing pays better than having your Seed Scarified. Hubam is too expensive to take any chances on your Seed Supply, and as our Seed is grown by one of the most re-

liable growers in the business, we know that it is pure and will give satisfactory results.

Growing the Crop

Hubam is handled in much the same way as any other Clover Crop. This of course depends upon the use you wish to make of the crop. If you are growing it for seed, the most popular way at the present time is to sow it in



Hubam, the Sensational New Crop.

drills and cultivate it. While this method entails more expense than broadcasting or drilling, the increased production of Seed that you secure pays many times over for the extra expense. When the Crop is handled in this way one pound of Seed is sufficient for an acre.

CATECHISM ON HUBAM

Q. What kinds of soils are adapted to Hubam?

A. Hubam will grow on almost any soil that is not sour. Poor clay hills, worn out pastures, and steep washy slopes all grow Hubam.

Q. Must the land be tilled?

A. Hubam is more tolerant to poor drainage, overflow and seepage than any other clover.

Q. How much rainfall is necessary?

A. It will grow when the rainfall is very light, and at the same time will make a crop in places too wet for Alfalfa. It requires as much moisture as clover to germinate, but after starting requires much less moisture.

Q. Does Hubam make much pasture, and do stock like it?

A. Hubam makes good pasture. Stock soon acquire a taste for it, and prefer it to clover after they become accustomed to it.

Q. Does it yield the same amount of hay as other clover?

A. No, it yields more.

Q. Does it pay as a seed crop?

A. It pays better than any other crop. One grower produced \$6,000.00 worth of seed on one acre.

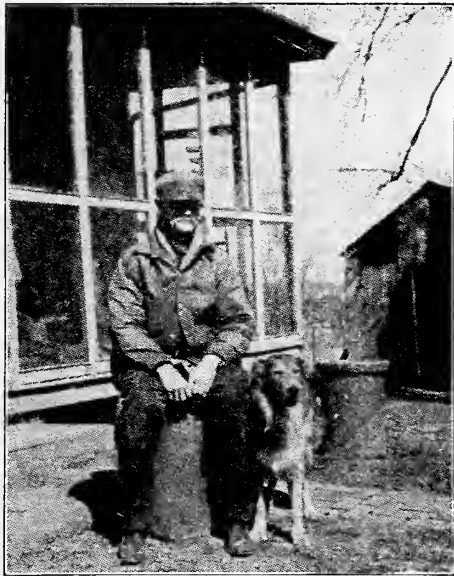
Q. How about Hubam for Silage?

A. Hubam, when mixed with corn in equal proportions, makes the best silage that we know of.

Q. How much nitrogen will the crop store in the soil?

A. When inoculated, it will gather as much as 195 pounds per acre, which, when bought in the form of commercial fertilizer, would cost around \$50.00 per acre.

How's This One?



We scouted around our files looking for a picture for this page. We came across a snapshot sent in by "Dad" Summers from down home in Malvern, Iowa. He's "proud of his boy," who is Mr. John F. Summers, manager of our Company,—and we're proud of "Dad"; so we're printing his picture on this page.

Dad Summers is an enthusiast on Sweet Clover,—says it built up the soil for him and paid out nicely whenever he planted it. Quite naturally he buys all his seeds from the American Mutual Seed Company.

Besides being a farmer and stock man, Dad is head of the bank at Malvern. His strict methods and square business principles are reflected in the management of our seed company. He believes in bringing the boys up right, and then letting them hustle for themselves.

Early Buying Makes for Satisfaction and Low Prices

One of the things that has changed in this old world of ours, is the seed buying season. Time was when it could all be left till Spring, but in those days help was plentiful and it did not cost so much; everything could be crowded into Spring.

But nowadays we do everything ahead of time, instead of at the last minute. We plan our work. We get better results through working ahead of our schedule, instead of working right up to the last minute.

Seed buying is one of the things that can rightly be pushed ahead.

Shipping conditions at their best are usually crowded to the limit in spring, due to heavy buying of all commodities. Now that most seeds are bought by mail, these Springtime shipping conditions must be contended with. We must not wait till Spring—we must buy in Winter, and give the seed houses and railroads proper time to handle this big volume of business. It will save time and delays later.

And You'll Save Money Too

If our experience is right—seeds are always higher in Spring than in Winter. It costs money to carry them over, and this is usually reflected on the Spring prices. Very seldom have we seen lower prices in Spring; invariably they are lowest in Winter,—so our advice is: **Buy early.** Take advantage of the situation and save where you can.

This season has its doubts as to Spring prices and conditions. No one can assure you of any great saving by waiting for Spring before you buy seeds. We can give you the benefit of our experience, however,—and our advice is: **don't wait;** get your order off now if you have not done so already.

Mr. Summers On "How to Save Money on Seeds"

Farming today is a business. When I put on my first long pants and started to "run the farm", it was just ordinary hard work. But today farming is a business—a science. Where business-like methods are followed, business-like methods pay,—and the better business man you make of yourself, the better profits you make for yourself.

I want to give you the inside of one way we make money in our big business in Chicago. I want you to read this story and take it as coming from a man who has been all through the farming game and has studied it inside and out, backwards and forwards. I believe that farming lends itself to certain plans of management just as well as the business firm located at the cross roads, or in a big city like Chicago.

The most important thing that we always watch in our big mail order business is the buying end of it. We make money in wise buying—lots of it. We not only buy seeds to sell you, but we buy paper for our catalogs, bags, motor trucks, office equipment and what not. We figure that we can sell at prices that attract trade, if we buy carefully.

In our seed buys, we make a great part of our profits through big deals. This gives us a low cost and enables us to sell at a price that makes business hum. Thus quick sales and small profits are a result of our wise buying. Sometimes the deals are enormous, but we go right ahead, knowing that we are buying for thousands of customers who will appreciate our trading in the end.

This brings me to the subject of wise buying on the farm as pertaining to seeds. Suppose you are in the market for ten bushels of extra fine clover; your neighbor wants five bushels; another, four hundred pounds of timothy, and so on. Buying as the single planter, you naturally pay the ten-bushel-price. But if you and the other fellows around you buy together, you talk big quantities; you get into big figures and you naturally get lower prices. This sounds reasonable, don't you think so? Then why don't you try it?

There is just as much need for local co-operative buying as there is for co-operative selling of your crops. In fact these days it is necessary to join hands. Every other line of business does it,—why not co-operate on the farm? Why not buy your seeds on the Club Plan.

This club idea has worked itself out so nicely for some of our customers and has proven so successful, and so many of them have been satisfied, that I am going to help this movement all I possibly can. If any one of you want my personal aid, you can get it. I will see that your correspondence gets quick replies. I will see that you get the lowest quantity prices. I will see that you get good seed, the best we have, and that you get it on time.

You are strong when you group yourself with your neighbors. You have a joint buying power that will command lowest prices. You can afford to buy only the best. When you plant the best, you get better profits. Club buying will help you all the way from planting to harvest. You cannot begin to imagine how much this co-operative buying movement will help you.

Talk it over with your friends. Get them to buy with you. Write to me personally and send me their names. I will see that each one get our educational and descriptive planting guide and catalog. You will get the wholesale prices on the quantities you ask for. You will save money, and thank me a thousand times over for directing your attention to this matter of club buying of seeds in your community.

Put some aggressive action back of your seed buying this year and handle it in a business-like manner. It is important. Begin it now. Let me help you.

Pleased With Seed and Service.

Onset, Pa., May 15, 1920

Dear Sirs:—or to whom it may concern, this is to certify that I received my grass seeds and am very much pleased to find them in the best condition. Thanking you for your quick shipment and the interest you have taken in my order, I remain always your customer.

HARRY E. BATES, R. No. 1.

Paris, Ill., March 25, 1920.

Dear Sirs:—Received shipment of clover seed and am well pleased with it.

ROY PATRICK.

Mineral City, Ohio, April 20, 1920.

Dear Sirs:—I have received the clover seed and am well pleased with it.

CHAS. W. CRIST.

Hodgenville, Ky., March 19, 1920.

Gentlemen:—I received my seeds all O. K. and they were really better than I expected for the money. Probably next fall I will want more seeds and I can then sell a good many more for you. Every one who saw my seed liked it.

J. W. CRADY.

The Clovers

Clover is probably the most widely grown of any of the legumes, and it has been styled the corner-stone of agriculture. It is used as a hay, pasture and soiling crop and often used as a green manure crop to be plowed under, and even where only the roots and stubble are plowed under it exerts a wonderful influence on the succeeding crop, for, by means of nitrogen fixing bacteria on its roots, it is able to gather the nitrogen from the air and store it in the soil in a form which can readily be utilized as plant food by the succeeding crop; for experience shows that from 30 to 50 per cent of fertility is in the roots and stubble and that is why grain crop following clover is often doubled in yield, and you can always raise more bushels of corn, wheat or oats after clover.

This is the year to sow plenty of Clover Seed. Not for many years has there been such an opportunity to sow clover seed as there is this year.

The crop is exceptionally good in most producing sections, the seed is good quality and is cheaper than it has been for several years. Many of us have been only sowing one bushel of clover where we should have been sowing four or five bushels. Now that prices have reached pre-war levels, it makes it possible to sow the necessary amount of clover to keep up the fertility of the land. Never before in the history of the nation has it been as important to keep up the fertility of the soil as it is at present, for with land values as high as they are the only way it can be made to pay is to produce the biggest crop possible on every acre. In order to do this, it is absolutely necessary to sow clover.

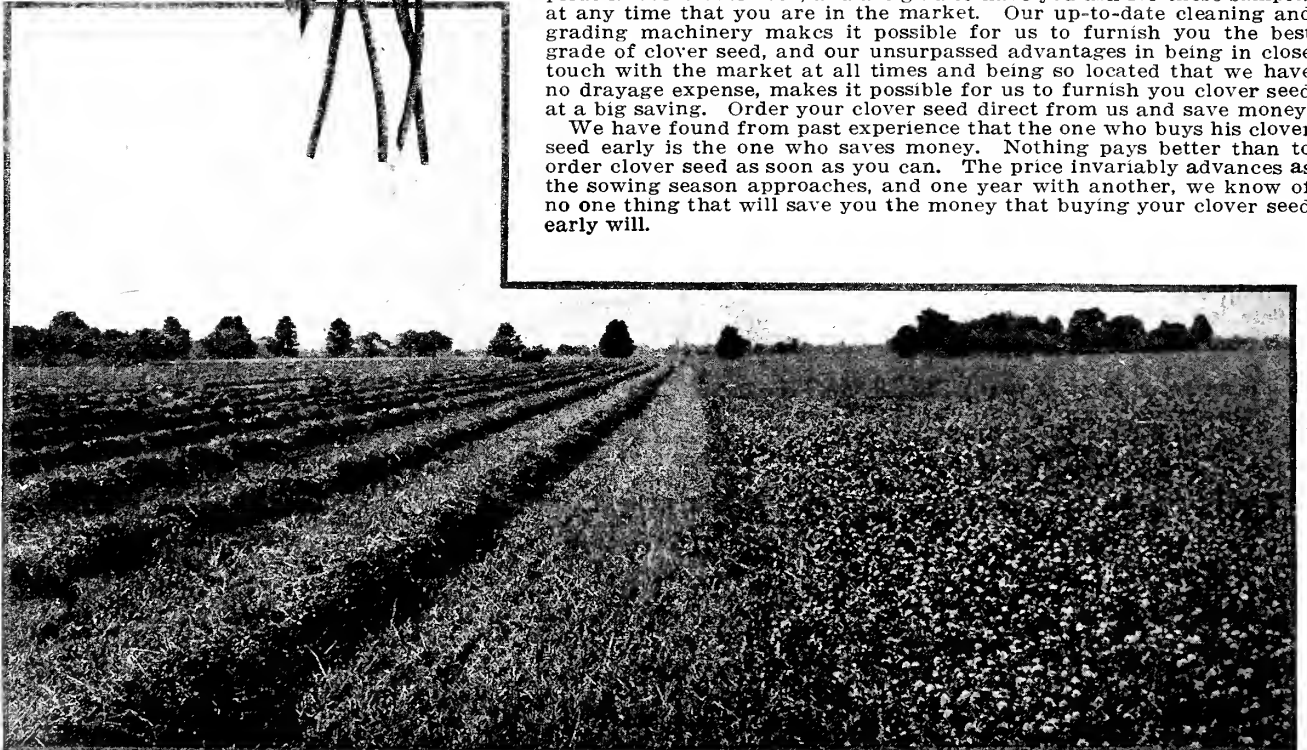
Another important fact to keep in mind in planning your crops for the next two years is that we have on hand in the United States a surplus of grain crops and a shortage of hay, pasture acreage and live stock. While we do not put ourselves up as a prophet, we feel that with conditions as they are at the present time, the wise farmer is the one that increases his grass crops and live stock, and he will then not only be producing the most profitable crops he can grow, but will at the same time be building up his farm.

Always Ask for Prices and Samples

Always ask for prices and samples of clover seed before ordering, as the market fluctuates so widely that we cannot make you a price at the time of going to press, for no one can foretell accurately just what future values will be; but we publish a special price list throughout the season and will keep any customers, who desire, in touch with the latest market quotations. We cannot, however, scatter these price lists broadcast throughout the country, but remember a postal will bring you the latest market quotations. To those who are so far away that they cannot keep in close touch with market values, I wish to say that should there be any change in the market they will get the benefit of it and we will ship the seed to the full value of the money sent.

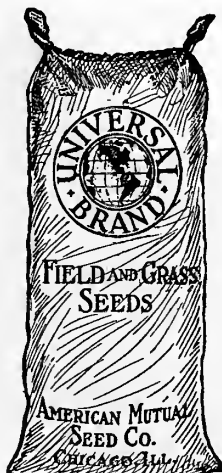
When you buy seeds from samples sent out by us it means that you will receive seed identical with the samples and in that way you will know exactly what you are buying. Remember, we have taken special pride in our Clover seed, and are glad to have you ask for these samples at any time that you are in the market. Our up-to-date cleaning and grading machinery makes it possible for us to furnish you the best grade of clover seed, and our unsurpassed advantages in being in close touch with the market at all times and being so located that we have no drayage expense, makes it possible for us to furnish you clover seed at a big saving. Order your clover seed direct from us and save money.

We have found from past experience that the one who buys his clover seed early is the one who saves money. Nothing pays better than to order clover seed as soon as you can. The price invariably advances as the sowing season approaches, and one year with another, we know of no one thing that will save you the money that buying your clover seed early will.

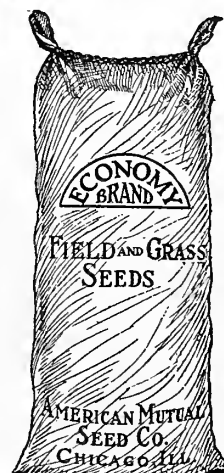




**PINNACLE
BRAND**
Represents
the Highest
Quality
of the
Crop



**UNIVERSAL
BRAND**
A Good
Serviceable
Grade of
Seed
that will
Give You
Good Results



Our Grades of Grass Seed

1. **PINNACLE BRAND (EXTRA FANCY)**
2. **UNIVERSAL BRAND (FANCY)**
3. **ECONOMY BRAND (CHOICE)**

We must necessarily handle more than one grade of seed. The reason for this is: First, it would be an utter impossibility to secure enough of our Pinnacle Brand Seed to do business. Then we would have left a lot of Fancy, Choice and Prime seed that we could not utilize unless we handled more than one grade of seed. Second, we could not meet the demand of the public for a seed cheaper in price than our Pinnacle Brand; and as we do not offer our Pinnacle Brand Seed in competition with ordinary grades, we would be placed at a disadvantage, and while we handle only the best grades of seed we can secure, you can readily understand the necessity of handling more than one grade.

Our Pinnacle Brand (Extra Fancy)

This is the best grade of seed that we handle, and we feel that we cannot recommend it too highly to you. This grade of seed is guaranteed to pass all state laws, and we feel that you will be well repaid for the extra expense of sowing it.

Medium Red or June Clover

**TRIFOLIUM
PRAETENSE**

This is the standard Clover on 90% of the farms in the world. It is probably the most important of the Clover family. It can be grown in most any section of the United States except in the arid or semi-arid sections. Medium Red or June Clover is one of the easiest crops to grow. It is usually seeded with small grain in the spring and usually produces a fair crop the same year. It can usually be used to better advantage in a crop rotation than the other Clovers and this in a measure accounts for it being used so extensively.

This variety of Clover is, without a doubt, the backbone of our agriculture today. It would indeed be a hard proposition, especially here in the Corn Belt, to farm without the aid of this wonderful legume. It is one of the main sources of nitrogen, especially throughout the Corn Belt, where the succeeding crop demands an abundance of nitrogen.

Medium Red Clover produces a very fine quality of hay. It cures quite readily and is high in feeding value. As a pasture crop it has no equal, where one only intends to pasture the land a short time and then put it into other crops. It builds up the land and produces an abundance of feed whether used for pasture or cut for hay. Timothy is usually sown with Medium Red Clover, and no other crop will give one the satisfaction that a nice Timothy and Clover pasture or meadow will.

Facts About Medium Red Clover

1. It produces large crops of the very best quality of hay.
2. It works better in the crop rotation than any other legume.
3. It not only adds nitrogen to the soil, but improves the physical condition.
4. It is one of the greatest pasture crops known.
5. A seed crop is often worth more than the value of the land.

Universal Brand (Fancy)

This is an exceptionally good grade of seed. It has been carefully re-cleaned, and many of the lots might be termed "extra fancy" by some, but we do not consider the lots of high enough quality to be sold under our Pinnacle Brand. Many of our customers sow this grade of seed, however, with equally good results.

Economy Brand

This is our third grade seed. We offer this seed merely to meet competition and do not recommend sowing it. It will not pass the Illinois Seed Law and we will not ship it within this State. This seed is often used to build up the soil on land that it will not pay to use the better grades on.

Special Lots and Country Run Seed

We oftentimes have small lots of seed that are of very good quality that we can make you a very low price on. This seed has just been cleaned through a farm mill and many times is off color, but many of our customers sow it from year to year and secure good results. These lots are often purchased at a big sacrifice and are offered at a price that will move them quick. Watch our Special for Big Bargains in Odd Lots.

We Are Large Handlers of Medium Red Clover

We handle enormous quantities of Medium Red Clover seed and rank up among the largest handlers of this crop in America. We are always in a position to quote you to advantage, and we feel sure that we can save you money on any Red Clover you may need. We are always glad to send you samples and quote you prices.

Club Together and Buy Your Clover Seed

Undoubtedly, some of your neighbors will be wanting Clover Seed as well as you. Talk the matter over with some of them the next time you see them and send in a big order and we will make you a very close price, for it doesn't cost us any more to handle a large order than a small one. We can mark the seed for each one of you so there will be no trouble in making distribution at destination, and the money saved on freight by having it all shipped to one man will more than pay for the trouble.

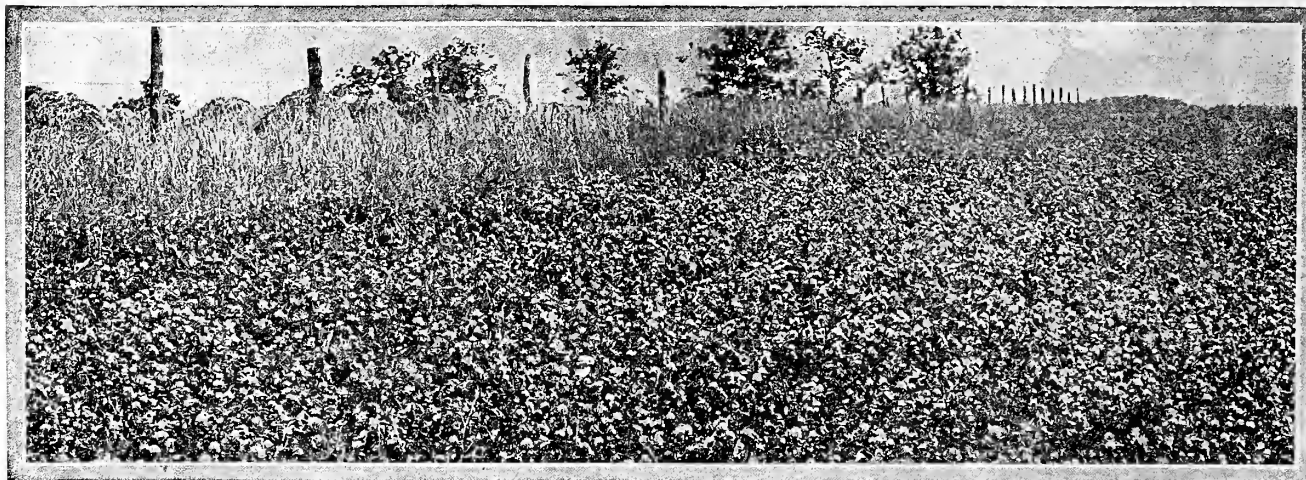
Think this matter over and send in a club order. We make a specialty of handling these club orders and know that you will be well pleased with the money you can save.

A Word About Price

The price of Clover Seed cannot be fixed definitely. Clover like many other seeds is constantly fluctuating in price. On this account we prefer to make you special quotations by letter. We are very large handlers of this grade of seed and are often able to get you in on an inside price.

Our Pinnacle Brand represents the very highest quality of seed, but if you desire a cheaper grade we have it and can save you money on every purchase.

We furnish you a guarantee with every bushel of Clover seed that we send out. Every lot is guaranteed to be satisfactory to you in every way. Test it in any way you care to and if it isn't right, we make it right. We are here to please you. Send us an order and be convinced of the big values we are offering.



Our Pinnacle Brand of Clover Seed Produces Wonderful Crops.

Mammoth Red Clover

This variety of Clover is also called Sapling or Pea Vine Clover. It is a strong, vigorous grower, and produces an abundance of forage. It has been criticised by some because of the hay being too coarse. Regardless of this fact, however, it is one of the most valuable of the Clover family.

Mammoth Clover is grown quite extensively throughout the Northern and Eastern States. Because of the fact that it ripens somewhat later than Medium Red Clover, many prefer it when Clover is grown in connection with Timothy, as the two crops ripen about the same time.

Mammoth Clover is without a doubt one of the greatest fertilizers grown. It is very hardy and produces an enormous tonnage, and its quick, hardy growing characteristics make it especially desirable for pasture. In the northern part of the United States where they can grow only one crop of Clover during the season, it is very popular.

It is the great crop that not only brings in an enormous revenue but builds up run down farms in a remarkably short time. This crop is especially suitable for growing on very thin land when a strong vigorous growing Clover that will add a large amount of humus to the soil is desired. It is claimed for it that it is more hardy than the Medium Red Clover and that it will succeed where the other clovers will fail. Mammoth Clover will undoubtedly be scarce this year and we wish to urge upon you to secure your seed as early as possible to insure getting it.

Crimson Giant or Incarnate Clover

The importance of this wonderful Annual Clover is becoming more and more realized each year. It is especially desirable as a green manure crop, and because of its fertilizing qualities is used extensively throughout the South.

This crop, while it grows luxuriantly on the rich, fertile, loam soils, fulfills its real mission when grown on the light poorer soils, as it will thrive on soil too poor for growing Red Clover successfully. When grown for fertilizing purposes this Clover is usually sown in the fall, used for a cover crop during the winter and plowed under the following spring. Plowing under a good crop of this Clover is equivalent to 20 tons of stable manure, and is the cheapest source of nitrogen known. It has been the means of placing thousands of acres of poor land upon a profitable basis.

Feeding Value. This crop when properly cut for hay is superior to even Red Clover, being richer in protein. It is especially valuable for silage purposes, is especially relished by dairy stock, and the enormous yields of silage which it produces per acre makes it a crop which is of great value to the dairy farmer. Write for samples and prices.

Lespedeza or Japan Clover

Lespedeza Stata

This plant, which was accidentally introduced into the United States about 60 years ago, has now spread all over the Southern States and into Kansas and Pennsylvania. It is highly esteemed as a constituent of pastures, and in some sections grows so luxuriantly that splendid crops of hay are cut. It sometimes grows to a height of 24 to 30 inches. Where the stand is very thin the plants have a prostrate habit, but where it is thick they grow upright. Many times yields of

hay exceeding two tons per acre are secured, and in exceptional cases three or even four tons.

Under conditions where Lespedeza is adapted it is proving to be a crop of exceptional merit. As the true merits of the crop become more widely known its popularity increases. It takes practically the same growing season as Cow Peas and Soy Beans. It grows on all types of soil and furnishes forage on barren, gravelly wastes where no other crop will grow. It will withstand any amount of grazing and is very similar in feeding value to Alfalfa.

Lespedeza is a very valuable crop for growing in combination with Red Top or Bermuda Grass, and the experience of farmers and the result of experiments have developed many different methods by which the crop can be grown with wonderful success. See green list for prices.

White or Dutch Clover

This variety of Clover is a great favorite in lawn or pasture mixtures, and is usually sown in combination with Blue Grass. It is a low growing, shallow rooted variety, and its chemical analysis shows it to be much richer in protein than any other Clover. The seed is very small and high in price, which has in a measure kept it from being more generally sown. See green list for prices.

At the time of going to press every indication seems to be that we will have a good crop of Clover of excellent quality, and this is certainly going to be the year to sow plenty of clover seed. There is one fact we wish to impress upon you and that is that clover is usually much cheaper in price early than later in the season. We want to impress upon you the advisability of buying your clover as early as you can conveniently do so. Nine times out of ten the early seed buyer is the one that saves money. Take advantage of our early purchases and send in your seed order as soon as possible.

GROWING THE CROP

SOIL—Clover makes its best growth on rich, fertile, well drained limestone soil, but will flourish on most any soil where there is sufficient rain fall, if the seed is inoculated; for Clover will grow and flourish in a soil that is low in nitrogen as long as there is a sufficient supply of bacteria to start the plants until they have an opportunity to develop tubercles on the roots for the purpose of gathering nitrogen from the air and storing it in the soil.

PREPARATION OF SEED BED—Clover is quite often seeded in the spring on winter grain, in which case no special preparation of the seed bed is necessary, as the frost usually checks the ground sufficient to form a covering for the seed. When sown with a spring grain crop, no special preparation of the ground is needed except that given the land for the grain crop, but the seed bed should be fine and rather firm in either case to guarantee prompt germination.

SEEDING—Clover is often a failure because it is not planted deep enough to secure proper moisture conditions. On clay soils it should be planted one inch deep, while on light sandy soils it should be planted one and one-half to two inches deep. It may be seeded in the autumn about six weeks before frost or in the early spring. Many follow the practice of sowing Clover on the snow in the early spring, but we question very much the advisability of this method as the wind often piles up the seed or the snow goes off with a rain, thus washing the seed in piles. Very good results have been obtained, however, by sowing on the ground after the snow has melted and while the ground is still freezing and thawing.

There is a wide difference of opinion as to the amount of seed to sow, but we have always followed the practice of putting on six quarts, and I believe we have every reason to feel proud of our past success in securing successful stands.



Alsyke Produces Wonderful Crops of the Very Finest Hay.

Alsyke (Trifolium Hybridum)

This wonderful Clover is becoming very popular throughout a vast area of the country. It will grow successfully over a wider range of soil and climates than any of the other Clovers. While it is especially adapted to cool, moist climates, it is capable of adapting itself to many adverse conditions and is very popular for growing on soil slightly acid where no other Clover can be grown.

Alsyke is a perennial, and because of this characteristic is especially valuable for growing on land where one wishes to secure a permanent pasture or meadow. Because of its not being susceptible to heaving and winter killing it is a very valuable crop to grow where climatic conditions make it hard to grow other Clovers.

Alsyke the Great Crop to Grow in Combination with Other Grasses

Alsyke when grown in combination with grasses makes one of the best combinations either for hay or pasture that can be grown. It is a perennial the same as most grasses, and this feature is especially commendable for growing it in combination with grasses. Timothy and Alsyke produce one of the best crops that can be grown for hay or pasture. It not only forms a thick bottom, thereby increasing the yield, but being a legume it greatly increases the feeding value of the crop.

We handle a mixture of Alsyke and Timothy that has been grown together, and as we are unable to separate it, we can make a very low price on this seed. Write us for special prices on Alsyke before buying your seed, as the market fluctuates considerably and we are unable to make you a firm price at this time, but when you are ready to buy just drop us a line and we will quote you firm prices, together with samples of the identical lots which we are offering you, thereby enabling you to see just what you are buying.

Alsyke Very Valuable for Growing on Wet Land or Land Slightly Acid

Alsyke is especially valuable in reclaiming wet lands, and will produce a wonderful crop where nothing but swamp weeds formerly grew. It is not injured by over-flowing, providing water does not stand upon it for too great a length of time, and it has been found to be of great importance in reclaiming districts through which drainage canals have been constructed, as it seems to be especially adapted to the low lying soil, and materially aids in getting such tracts of land in shape for future cultivation.

Much of the very best land in some sections is slightly acid and prevents one from growing Clover upon it without first giving it a heavy application of lime, and while Alsyke prefers a soil rich in lime, many are growing it with marked success when no other legume would grow. Its adaptability to grow on such land has been a great factor in the agricultural success of such sections, as it has saved the farmers thousands of dollars for commercial fertilizers.

Alsyke Rich in Feeding Value

Alsyke produces the very finest quality of hay or pasture that is very rich in feeding value, especially so in protein. Some authorities have advanced the theory that Alsyke produces eruptions of the skin when pastured by horses. The actual experience of the growers have failed to fault it for this fact.

From every source comes nothing but words of praise for this wonderful crop, and reports of its heavy yields. Alsyke is preferable to other Clovers for growing in combination with Timothy and other grasses, because of the fact that it does not grow so coarse and produces a finer quality of hay.

Reasons Why You Should Grow Alsyke

- 1st—It is a legume and will enrich the soil.
- 2nd—It can be grown on wet land where no other legume will grow.
- 3rd—It can be grown on land that is acid.
- 4th—It is rich in feeding value.
- 5th—It is a perennial, and when once you get a stand it will endure for years.
- 6th—It greatly increases the feeding value and yield where grown with the grasses.
- 7th—It does not take as much seed to sow an acre as it does of other Clover.
- 8th—It is not usually any higher in price than other Clover.

The Value of Alsyke Not Fully Realized

Only within the last few years has the real value of Alsyke begun to be appreciated. It has enabled thousands of farmers to grow Clover who could not do so before because of the acidity of their soil. Because of the fact that this crop has made it possible to grow Clover on this land has been worth thousands of dollars to the American farmer. Teamsters and others have come to appreciate the value of Alsyke within the last few years, and today Timothy mixed with Alsyke commands the very highest prices on the market.

Alsyke Valuable as a Seed Crop

Alsyke is one of the most valuable crops that can be grown for a seed crop. It seeds very heavily and the setting of the seed is not as susceptible to weather conditions as other Clovers. Alsyke not only produces a very heavy crop of seed, but the seed usually commands a very fair price. We do not know of any way by which you can make money any easier than by growing a crop of Alsyke for seed. It is easily harvested and easily threshed. Grow Alsyke for Seed. It will make you more money than any crop you can grow.

We Can Save You Money on Alsyke

We are in a position at all times to save you money on Alsyke. Handling large quantities of this seed as we do enables us to make a big saving for you on Alsyke, as we are in close touch with conditions in the Alsyke growing sections and can at all times give you the very best that the market affords. See green list for latest quotations.

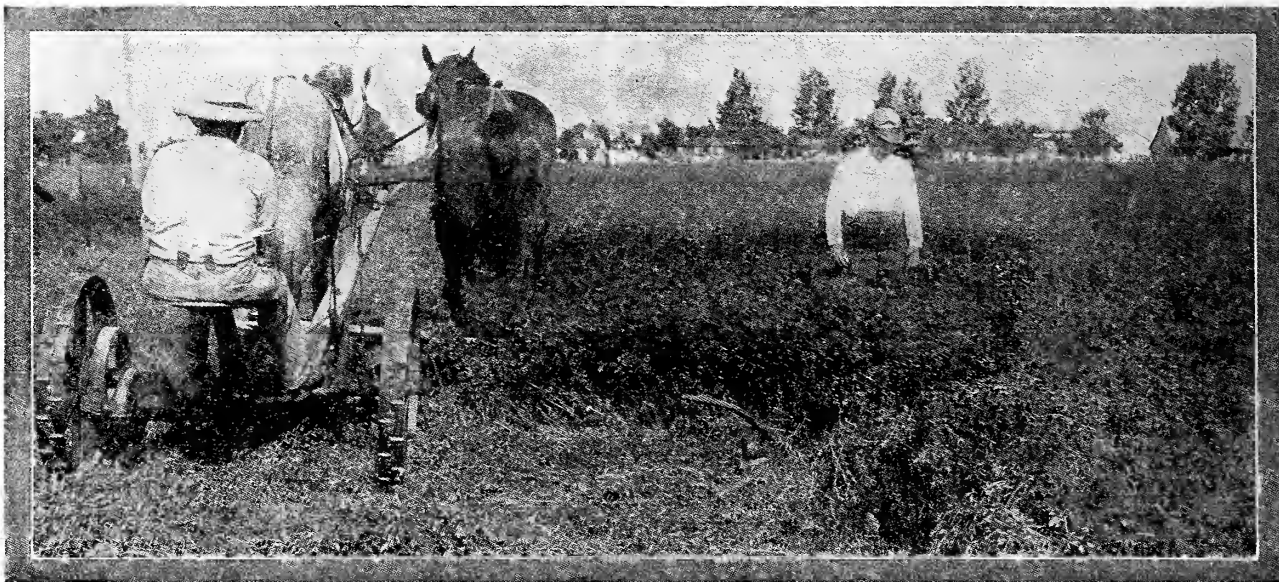
GROWING THE CROP

SOIL—Alsyke prefers a rather cool, moist soil, but can be grown on most any soil where any crops will grow.

PREPARATION OF THE SEED BED—No special preparation of the seed bed is needed, and all that is necessary is to give the seed a light covering.

SEEDING—Alsyke should be seeded at about the rate of 1 bushel to 8 acres, and the best results are obtained by sowing in connection with a light seeding of small grain.

HARVESTING—The method of harvesting depends upon to what use you wish to put the crop, as it may be pastured, cut for seed or for hay. If cut for seed a common mower with a bunching attachment is the most practical method, and when cut for hay it is handled the same as any other hay crop.



Grow the Great Money Crop Alfalfa

Probably no other crop in the history of the nation has been the means of extending agricultural development over as wide an area or to as great an extent as Alfalfa. From the arid West to the humid sections of the Corn Belt, it is making it possible to grow upon the farm a greater number of cattle, hogs, horses, and sheep than it was ever possible before Alfalfa entered the realm of the live stock farmer.

Success with Alfalfa Depends to a Great Extent Upon the Grower

Alfalfa is an easy crop to grow if proper precautions are taken, but it is absolutely necessary to sow only the best seed obtainable to secure the best results in growing Alfalfa. The reason for this is, no one should use seed from a more temperate climate than that in which he wishes to grow his crop, for no one feature is so essential as to secure good, hardy seed stock. Alfalfa is no longer an experiment; it is a reality. But still numerous farmers persist in experimenting with it—that is, they try to grow it by using a cheap grade of seed, by not preparing the seed bed, by not inoculating, and by sowing it upon sour soil without the use of limestone; and any one of the four mentioned conditions is enough to keep one from securing a stand of Alfalfa. To this class of farmers may be attributed the reason for Alfalfa not being sown in certain sections, for they have by their slipshod methods tried to impress upon the entire community the folly of trying to secure a stand of Alfalfa, claiming, because they had failed by their slipshod methods, that it could not be grown in the neighborhood, while as a matter of fact, Alfalfa can be grown in every state in the Union, and in 99 per cent of the counties, and on 99 per cent of the farms. This is not a "wildcat" statement, but a truth based on actual statistics, so do not hesitate about attempting to grow this great crop, because some one in the neighborhood has tried and failed, for you cannot afford to be without it upon your farm. It will be worth double to you what any other crop has been that you have grown, and we will venture the assertion that if you will follow the simple directions set forth in this Guide for securing a stand that you will not be disappointed.

Grow the Great Money Crop

Don't miss the opportunity to produce two tons of high-priced feed stuff where only one grew before. While Alfalfa growing is only in its infancy in the Northern and Eastern States, the farmers are beginning to appreciate the wonderful possibilities of this great crop, as indicated by the enormous increase in sales of **Recleaned Alfalfa Seed**, showing that Alfalfa is being sown in the North and East upon the most prosperous farms in those sections.

Get in line, get some of the seed of this great revenue producer. Don't let your neighbor grow better and bigger crops than you do simply because he grows this great legume, and after harvesting twice as much hay per acre as he could from any other crop he has his land in such a state of productivity that he can grow twice the number of bushels per acre that you can.

Be progressive. This is the age of brains; don't try to squeeze out a bare existence by plodding along the same old rut year after year. Take advantage of the possibilities of doubling your income by growing this great money crop.

What Alfalfa Will Do—What It Is Worth

Alfalfa can be grown in every State in the Union. In money value Alfalfa is worth 45 per cent more than Clover and 60 per cent more than Timothy.

Alfalfa produces from 3 to 7 tons of hay per acre.

It will grow 3 to 5 crops a year.

Furnishes more feed per acre than any other forage.

One acre will pasture 20 pigs for six months.

Two acres will feed ten milch cows by soiling.*

Three lbs. a day make a full feed for fattening lambs.

Five pounds make a full feed for fattening sheep.

Thirty-five pounds make a full feed for fattening steers.

Sheep fed on Alfalfa will gain from 8 to 15 pounds in 75 days and will double with small grain ration added.

Fed to dairy cows and it maintains the flow of milk. Chopped fine with corn meal and you have a mixture equal to more than the original corn meal.

The cost of maintenance is smaller with Alfalfa than with other forage crops.

Alfalfa not only enriches the soil but its long roots penetrate far down and act as a subsoiler.

Alfalfa Gaining Favor in the Eastern States

It was formerly thought that Alfalfa was adapted only to sections of the West, but it is today being grown in practically every state in the Union and is proving of great value wherever grown. Alfalfa will undoubtedly produce more feed upon an acre than any crop that can be grown. The returns that an acre of good Alfalfa will bring exceed that of any other crop. In sections of the country where a large amount of feed must be grown upon an acre Alfalfa can be depended upon, and if you are not growing it and wish to produce more upon an acre than you have ever grown before, sow Alfalfa.

Alfalfa the Greatest of all Forage Crops

Alfalfa now has an acreage greater than that of any other legume or grass cut for hay, and not grown in combination with another. It occupies 21.1 per cent of the total tame hay acreage in the United States. There are sections where it was practically unknown fifteen years ago and where today one can find but little other forage growing. No other crop has been the means of extending agricultural development over as wide an area to as great an extent as Alfalfa. From the arid West to the humid sections of the Corn Belt, it has made it possible to keep upon the farm a greater number of cattle, hogs, horses, and sheep than before Alfalfa entered the realm of the live stock farmer.

It was once thought that Alfalfa was adapted only to western conditions, but success has been had with it to such an extent that it is grown in every section of the country today. Wherever it is once started it remains. If you grow Alfalfa once you will never be without it. In some sections where it was thought impossible to grow Alfalfa, successful stands have been gotten by the use of lime, good seed and careful preparation of the ground.

Alfalfa is not a difficult crop to grow when proper precautions are taken. One of the chief factors to consider is the source and reliability of the seed. It is absolutely necessary to sow only the best seed obtainable to secure the best results in growing Alfalfa. A cheap grade of seed will be apt to bring a cheap return. Good seed with proper inoculation, sown in a good seed bed where the soil is sweet, means the greatest return possible from a forage crop.



Hardy Northern Grown Alfalfa Seed

We have made a careful study of the Alfalfa plant, and have found that many of the failures were caused by sowing seed not suitable for the particular locality. The Southern grown seed will not produce satisfactory results in the Northern and Eastern States, and on this account we handle but Northern grown seed, and are always in a position to save you money on the very best Northern grown seeds that can be secured. We make a specialty of the Nebraska, Montana, and Dakota grown seed, and being in close touch with the best growers in these sections it enables us to take good care of you on anything in the Alfalfa seed line. We have Alfalfa seed suitable for growing in any climate and our prices are always right.

Grimm Alfalfa

Resists Winter Blasts and Summer Droughts

This variety is considered the hardest specie of the alfalfa family. The secret of its success where others fail seems to be due to its more branching or lateral root system. This characteristic makes it less susceptible to heaving caused by frequent thawing and freezing where the ground is bare of snow.

Grimm Alfalfa gets its name from Wendelin Grimm of Carver County, Minnesota, who introduced it over thirty years ago. It has since been grown extensively in Southeastern Montana and Western South Dakota, where the most extreme conditions of heat, cold, and drought exist, the thermometer often registering over 100 degrees in summer and 40 to 50 below zero in winter. Being grown under such adverse circumstances has made it hardy enough to withstand the most adverse weather conditions.

This Variety Makes It Possible to Grow Alfalfa No Matter Where You Live

No matter in what part of the United States or Canada you are situated, you can grow Grimm Alfalfa. It's the variety that never disappoints. It always makes a crop. No re-seeding to be done. The older it is the better it gets. It has been grown for years under the most adverse conditions and it never winter-kills. It's the variety that will insure your alfalfa field against any kind of weather conditions.

Our seed is grown in the Black Hills district where the plants are often subjected to 40 to 50 degrees below zero with very little snow for protection. Alfalfa that will thrive there will certainly do so anywhere else that it may be sown.

As the price is rather uncertain at the time of going to press, we wish to refer you to price list enclosed, or better still, write for prices and an exact sample of the seed we will fill your order with.

Liscomb

This variety of Alfalfa secures its name from G. W. Liscomb, who first sowed it some thirty-five years ago in Eastern Montana. The old field is still in existence and is said to yield a splendid crop of seed each year.

The Liscomb Alfalfa belongs to the group known as Media. Associated with this variety in this group are the hardest varieties of Alfalfa that we have. The chief characteristics of this group are:

- 1st. The more branching root system.
- 2nd. The receding crown.
- 3rd. The variegated flower.

Often times the crowns on the group of Media or hardy strains of Alfalfa are 3 or 4 inches below the ground. The flowers of the alfalfa belonging to these groups are variegated and range from a greenish-white to a deep maroon, while the flowers of the ordinary alfalfa are blue in color.

This seed is grown for us in the Black Hills of South Dakota and in Montana. It is the very hardest strain of alfalfa that you can buy. Don't take the chance of having your alfalfa freeze out, but buy this hardy Northern grown seed and be sure of having plenty of alfalfa.

See Green List for prices.

Dakota Grown Alfalfa

In that section of South Dakota lying west of the Missouri River is the home of the hardy dry land strains of Alfalfa. In this section is produced the hardest Alfalfa seed in the United States. The severe winters to which these fields of Alfalfa have been subjected for years have changed the entire root system of the plants until you no longer have the one main tap root that so often breaks during the freezing and thawing of the winter months and causes winter-killing. Instead you have a branching root system that enables the plants to resist heaving and prevent winter-killing.

In our Dakota Grown Seed that we are offering you are getting seed that will produce plants with this characteristic, and seed that will produce a field of Alfalfa that will withstand the winters of any climate. This seed, we feel, is the cheapest Alfalfa insurance that you can buy.

Costs More—Worth It

This fancy, hardy, Dakota Grown Seed will cost you a little more money than other seed, but we believe that it is worth it. Our past experience has proven beyond a doubt that this seed will withstand the winters anywhere in the United States and in many portions of Canada.

We feel that in offering you this Hardy Dakota Grown Seed that we are offering you Alfalfa that can be relied upon to produce a crop.

We Make a Specialty of Dakota Grown Seed

We are very large handlers of Dakota Grown Seed. Our Mr. Killey, who handles the growing end of our Alfalfa Seed business, has spent the past 18 years in the Black Hills section of South Dakota and in Eastern Montana. He knows the best fields and the most careful growers, and you can depend upon the seed that we furnish you being right in every way.

We buy those varieties of Alfalfa direct from the grower, and then we know just what we are furnishing you. We are in a position to furnish you the most reliable Alfalfa seed upon the market, and to furnish it to you at a price that will save you money.

Why We Can Make You the Best Price on Hardy Varieties

You will note in comparing our prices with those of other dealers that our prices on Hardy Strains of Alfalfa are quite a little below the prices asked by other dealers. The reason for this is simply that when you buy from us you are saving two or three middlemen's profits. We furnish you your seed direct from the growers. Before it is shipped from the Northwest our men inspect it. It comes direct to our big cleaning plant here in Chicago, where it is carefully cleaned, graded, and shipped direct to you. All lost motion is taken out of the transaction when you buy your seeds from us. There is one small handling profit and that is all. Whether you buy a bag or a carload, you get the advantage of our economical buying operations that save you money.

Don't fail to secure our latest quotations and our samples that we are always glad to send you, before buying your Alfalfa seed.

Cossack Alfalfa

The Hardest Yielding Strain of Alfalfa Known

This wonderful strain of Alfalfa was imported into the United States by Dr. N. E. Hansen, Vice-Director of the South Dakota Experiment Station and conceded by all the foremost Alfalfa experts in the United States. Dr. Hansen discovered this variety of Alfalfa in the dry arid Russian Steppes when 40 and 50 degrees below zero was not at all uncommon. This variety is so hardy that in one field of 40 acres in Western South Dakota, which has been carefully checked up, they have found that not a single plant has winter killed.

Some Astounding Facts Regarding Cossack Alfalfa

1. A single plant has been known to weigh eight (8) pounds.
2. A single plant has grown the height of a man.
3. A single plant produces 1,000 shoots.
4. It will increase the yield of hay from one and one-half to two tons per acre.
5. It is so hardy that it is an impossibility for it to heave out or winter kill.

What Mr. Killey, our Alfalfa Seed Expert Thinks of Cossack Alfalfa.

Philip, South Dakota, September 25th, 1919.

America Mutual Seed Co., Chicago, Ill.

Attention Mr. Summers,

Dear Sir:—Have just returned from a 250 mile drive and have inspected some very fine fields of Grimm and Cossack in the last few

days. I become more and more enthusiastic over the Cossack variety as I see more of it. I have seen this crop produce the best crop of Alfalfa that I have ever seen grow, on land and under conditions you would not think it possible for a plant to live.

I feel that we are making a mistake in not urging the sowing of this variety enough in the Eastern and Northern States, for I feel that it would work out equally as well for them as it has here in the Northwest. I am picking up every good lot of this seed that I can contract for. I feel that we will be doing our customers a real service in getting this seed for them.

This variety only requires three pounds of seed per acre, and even though it does cost more than a dollar a pound, it is not as expensive to sow as the common varieties, and it will double the yields of the common kinds.

I want to urge upon you, Mr. Summers, to get this crop before our people, for I believe

Prof. N. E. Hansen with One Single Plant of Cossack Alfalfa.

the Cossack Alfalfa is one of the best things we have had to offer our customers in many days and it will make them double the money any seed will that you could sell them.

Very truly yours,
(Signed) J. A. KILLEY.

About the Price of Alfalfa

At the time of going to press it is too early to tell just what the price of alfalfa seed will be. It is our opinion, however, that you will not see the big reduction in the higher grades of alfalfa that you will in other seeds. Many of the fields have been seriously damaged in the best producing sections by unfavorable weather conditions, and it is our best judgment that alfalfa will be a good buy early in the season and we want to urge upon you to cover your requirements at as early a date as possible for you may not be able to secure the best of seed later.

Common or American Alfalfa

The most popular variety of alfalfa is the Common or American Alfalfa. The best seed of this variety is produced in the high dry altitudes of Kansas, Nebraska, Colorado and Utah. This plant has transformed the bleak and barren prairies of the West into some of the most productive farms in the United States. What it has done for these farmers in the West, it will accomplish for you, and if you are not growing alfalfa at the present time, we would certainly urge you to start doing so at once.

We are Large Handlers of Alfalfa

We are large handlers of Alfalfa seed and handling this seed in large quantities as we do enables us to make you very close prices on our different grades of alfalfa seed. Buying up the seed in large quantities enables us to secure it at a price lower than the small dealer can secure it. This, together with the fact that our large volume of business enables us to handle your orders at a low cost, makes it possible for us to save you a lot of money on your alfalfa seed.

We aim to secure our alfalfa seed only from those sections where the seed reaches the highest state of perfection, and will reproduce strong, healthy, hardy plants. We are very careful about where we secure our alfalfa seed, and we feel that we are at all times in a position to furnish you alfalfa seed that will give you the very best of results.

Irrigated Seed Not Suitable for Our Conditions

The alfalfa seed that is grown on irrigated land is not suitable for sowing here in the Corn Belt. It does not produce the strong, healthy, vigorous plants that the dry land seed does, and on this account we want to caution against using the irrigated seed. We have on hand a nice lot of dry land grown alfalfa that we feel sure will give you the very best satisfaction and we feel that we cannot recommend it too highly to you.

Our Pinnacle Brand Seed the Best

Remember in ordering your alfalfa seed that we recommend the sowing of the best grade of seed. Our Pinnacle Brand Seed represents the highest quality, and we want to urge upon you the importance of sowing our Pinnacle Brand Seed. Your success with alfalfa depends much upon the kind of seed you sow and we feel that you will be many times repaid for the extra expense you are put to in securing the best grade of seed. Many times a lot of seed may look just as good, but unless it comes from a reliable source you do not know under what conditions it was grown and it may turn out to be a great disappointment to you. We use the greatest of care in furnishing our customers seed that has been grown under such conditions that it will give them the best of results.

GROWING THE CROP

Soil. Alfalfa is very particular about the soil required for its best development; in fact, more failures in securing a stand can be attributed to not paying attention to the requirements necessary in placing the soil in condition to grow Alfalfa than upon any other one thing. The soil for the production of Alfalfa must be well drained. Alfalfa, as the often repeated statement is made, "will not stand wet feet." Alfalfa will not thrive upon a sour soil, and any soil which changes the blue litmus paper from blue to pink will not grow Alfalfa until a good supply of limestone has been incorporated into it. Good drainage and ground limestone, together with proper inoculation and pure seed seem to be the chief pre-requisites for successful Alfalfa culture, especially in Illinois.

Preparation of the Seed Bed. The seed bed in this section should be plowed as early as possible, or better yet, summer fallowed; it should be worked into a fine state of cultivation, and any extra work put upon the seed bed will be more than repaid by the extra yield produced, and in the uniformity of the stand secured, for one of the first considerations in the handling of the field is to get rid of all weeds.

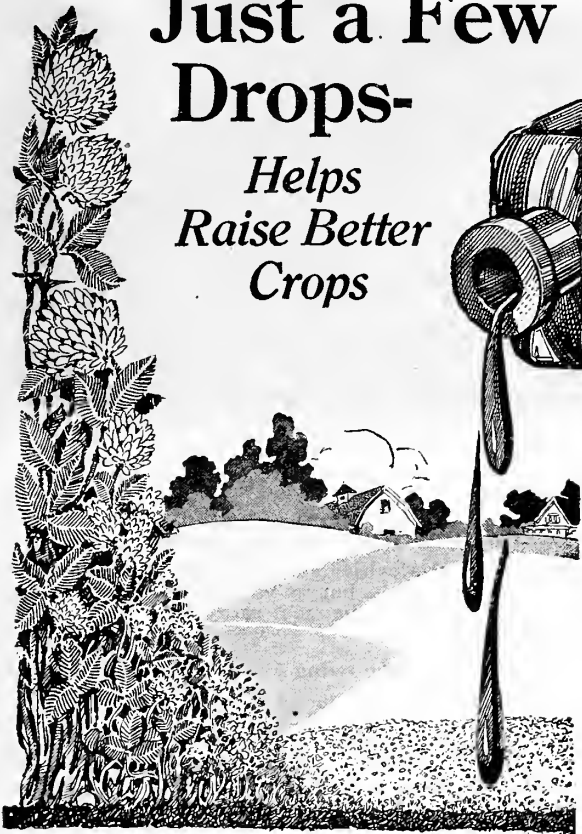
Seed and Seeding. Get good, pure, unadulterated seed. It is not only necessary that the seed should be strong in germinating qualities but should be free from noxious weeds, and be of a variety the seed stock of which is grown in such a locality as it will meet the requirements of the section in which you wish to grow the crop. The seed should also be inoculated in order to secure a strong, vigorous growth of young plants, and although Alfalfa will thrive in many sections without inoculation, the extra growth secured from inoculation always many times more than repays one for the extra cost. It should be sown at the rate of from 12 to 15 pounds per acre. The time depends upon the latitude, season, and condition of the land. In some sections it is sown as early as April, but more is sown in May.

Sowing with a nurse crop is becoming popular and barley, especially the beardless, is found to be the most satisfactory nurse crop.

Harvesting. The time of harvesting will depend upon whether the crop is to be cut for hay or seed. In cutting the Alfalfa for hay the best time to start the mower is just as the young shoots of the second crop are commencing to start. Alfalfa cut at this stage not only produces the most palatable and nutritious feed and the greatest number of tons per acre, but it seems to have the effect if it is allowed to stand until this stage of helping the second crop along, and it will only be a comparatively short time after the first crop is removed until you can start mowing on the second crop.

Just a Few Drops-

*Helps
Raise Better
Crops*



Tubercle-Germ Insures Results

Inoculation with Tubercle-Germ is not an experiment. It has been demonstrated in all parts of the United States that the reason for not securing a stand of the legumes is caused by not sowing seed which has been inoculated more than to all other causes.

Easy to Inoculate with Tubercle-Germ

- 1st. Pour the seed out on the floor.
- 2nd. Then add what water to the Tubercle-Germ that you think it will take to moisten what seed you have.
- 3rd. Thoroughly mix or stir the seed and spread out on the floor to dry in a dark place.

Caution. Do not expose the seed to the sunlight after treating with Tubercle-Germ until you are ready to sow.

Our Prices are Low

The standard price of this Pure Culture is \$2.00 per acre; 5 acres, \$9.00; and as our culture is equal to the best upon the market and is fully guaranteed, we can make a big saving for you by using our wonderful nitrogen-fixing bacteria.

½ Acre Size	\$0.60	10 Acre Size	\$7.50
1 Acre Size	1.00	20 Acre Size	14.00
5 Acre Size	4.00		

Tubercle-Germ Absolutely Guaranteed

This Pure Culture preparation is put up in bottles ready to use, and every bottle is guaranteed to give perfect inoculation to the seed for which it is prepared, or we will refund your money.

We have a special Bacteria Tubercle-Germ for each of the following legumes:

Sweet Clover
Alfalfa
Mammoth and Red Clover
Crimson Clover
Alsike Clover
Cow Peas

White Clover
Soy Beans
Field Peas
Vetch
White Navy Beans

Be sure and mention the crop which you wish to inoculate in ordering Tubercle-Germ. Remember inoculation is not a seed expense but a crop insurance. It is not an expense but an investment, that means 100 per cent dividends on the original cost.

Include TUBERCLE-GERM In Your Order

Drovers Dairy Feed

THE FEED YOU CAN AFFORD

Here is a Dairy Food, true to its name, that offers you a real money making and money saving opportunity. It means a big saving to you. It is a Dairy Food that you will not find advertised outside our own modest efforts in our regular mail to you. It needs no promoting, it needs no clever advertising campaigns to push it on the market. It is just as good as a dairy food can be—only it is sold direct to the user at the lowest wholesale price.

What Drovers Dairy Food Is

You will find most dairy foods alike in some respects except the advertising that it created to sell them. Every manufacturer has a different true story to tell—but the foods are mostly the same. Drovers Brand is not the only one—it's just one of the many. It is like all other good grades as far as palatability, milk making and body building are concerned, and it is made by us and sold direct by us under our same unchallenged guarantee that has made the American Mutual Seed Company famous for fair trading.

Guaranteed Analysis Drovers Dairy Food

Protein, 18%
Fat, 4%

Fiber, 10.5%
Ash, 6%

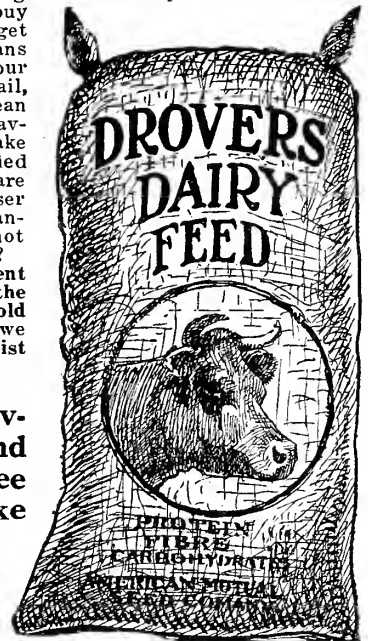
Don't Take Our Word, Take Your Own Test

A sure way to find out for yourself just what this food will do for you, is to get a supply and give it a test. After you have been convinced that it is a real feed then you will adopt it as a standard feed for your cows, coming direct to you from the manufacturer at prices that will surely mean a great saving during a year's time: The more "Drovers Dairy Food" you use, the more you save all around. You will find it just as good as most dairy foods, only it is sold direct to you less the high cost of advertising and dealers' profits.

The next time you buy Dairy Food be sure to get Drovers Brand. It means very little effort on your part to buy direct by mail, but it certainly does mean a great big acceptable saving that surely will make you all the more satisfied with your trading. You are entitled to the direct user prices, why not take advantage of them? Why not buy Drovers Dairy Feed?

Price—Owing to present market conditions and the fact that this product is sold on a very close margin, we refer you to our green list for quotations.

Order Some Drovers Dairy Feed and you will soon see how the Cows like it. You'll see an improvement in your Cows, too.



They Like Our Seed and Our Service.

Weston, W. Va.

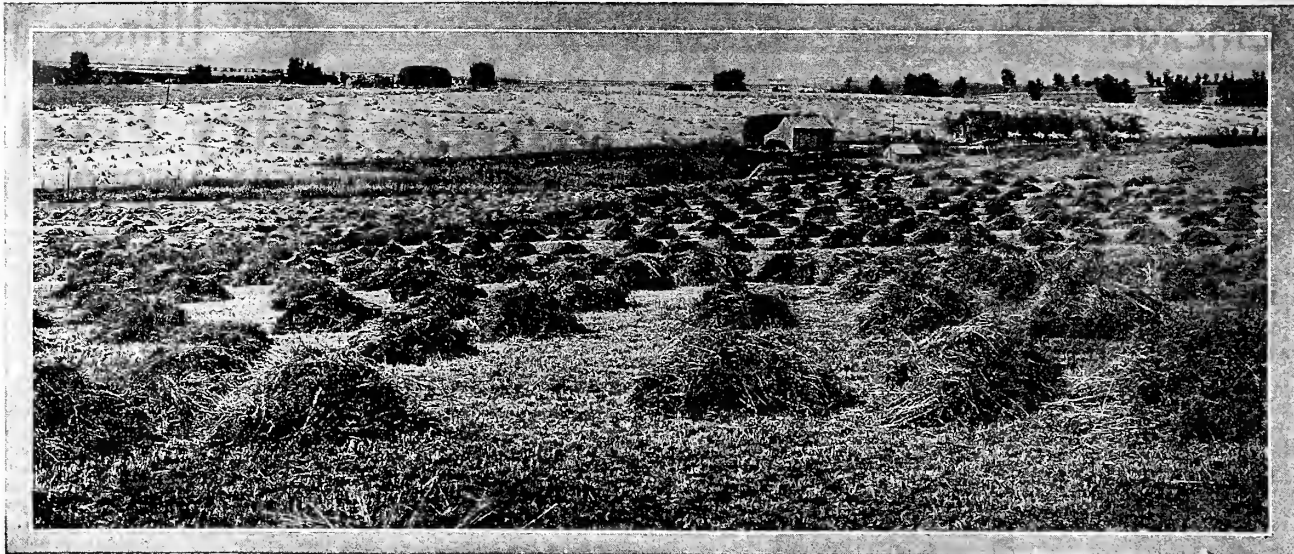
Gentlemen:—I received the seeds in which the Sudan Grass came and they were all fine. I want to say that the Sudan Grass is the best grass I ever saw grow on my farm. This fall I will send for some more seeds because your seed is clean and good.

Yours truly,
CECIL BAILEY.

R. F. D. No. 1, Lineville, Pa.

Gentlemen:—I received from Express Co. on the 6th inst. my two bags of seed all O. K., viz. timothy, alsike and clover. Allow me to thank you very kindly for your kindness and courteous, also prompt attention to my order and hope to do more business with you very soon. Would like to have a catalogue from you once in a while to keep in touch with current prices.

GEORGE STANTON.



Four and One-Half Tons the First Cutting.

Sweet Clover

The Great Soil Renovator for Waste Land and Run Down Farms

Probably no other crop has sprung into prominence or gained in favor as a cultivated crop so rapidly as has Sweet Clover, and it has not only become one of the most valuable hay and pasture crops, but its value for soil improvement is without an equal. Sweet Clover makes a strong, vigorous growth, and is one of the most hardy plants of the Clover family. It will make a crop for you on land where nothing else will grow.

All Leading Agricultural Men Indorse Sweet Clover

Iowa Homestead Indorses All that is Claimed for Sweet Clover

J. F. Summers, Chicago, Ill.

Dear Sir:—I am glad to learn that you are engaged in a campaign to popularize the growing of Sweet Clover. There is an important place for this crop, because so many uses can be made of it. As a soil builder it is not excelled, if equaled, by any other crop that I am familiar with. It furnishes excellent pasture, and, unlike other legumes it never produces bloating. When cut at the right time it produces good, palatable hay, and of course it is a very heavy yielder.

I predict that Sweet Clover will be used quite extensively in the future in fitting land for Alfalfa. The same organism lives on the roots of both crops, but it is much easier to get a stand of Sweet Clover than Alfalfa, and that is why it can be used to great advantage by those who wish to grow a perennial legume like Alfalfa. I think it is an excellent thing to sow a little Sweet Clover along with Timothy and Clover, and even though it does not mature at the same time that these crops mature it is an excellent thing to have scattering plants of Sweet Clover, because the roots penetrate so deeply, and, as said before, growing this crop invariably gets the ground in good condition for Alfalfa.

Very truly yours,

JAS. ATKINSON, Editor, Homestead.

John M. Evvard, Assistant Chief in Animal Husbandry Iowa Experiment Station, Secures Some Phenomenal Results with Hogs Pastured on Sweet Clover

An acre of Sweet Clover pasture in 1910 in conjunction with an average daily grain ration of practically four pounds per 100 pounds live weight daily produced an average daily gain of 1.02 pounds on each hog. With corn at 50 cents a bushel, the gains cost \$3.70 a hundred. The returns of an acre show a net profit of \$42.07 and \$74.50, with corn at 50 cents and hogs \$5.00 and \$6.00 respectively, per hundred weight.

A bushel of corn fed to \$5.00 and \$6.00 hogs upon Sweet Clover netted, after all expenses for rental, plowing, discing, harrowing, seeding and seed were paid, 73.2 and 91 cents respectively. Assuming that a bushel of corn will produce 10 pounds of pork, and deducting the amount due to corn, we find that an acre of Sweet Clover forage is estimated to produce 254.3 pounds of pork.

Successful Farming Considers Sweet Clover Very Valuable from both a Feeding and Fertilizing Standpoint

Mr. J. F. Summers.

It is difficult to understand why the many valuable points of Sweet Clover were not discovered sooner, and, now that its value is conclusively demonstrated, it is equally difficult to understand why it is not much more extensively grown. Any one of its many good points are enough to recommend it.

For quantity and quality of hay and pasture, Sweet Clover ranks with Alfalfa; as a seed crop it can be made exceedingly profitable; and, for soil improvement, it heads the list.

Add to the above good points the fact that Sweet Clover can be grown upon land which will not produce Alfalfa and other Clovers successfully, and also the fact that it is exceptionally well adapted to use in a crop rotation, and you'll have to admit that it is hard to say too much in favor of Sweet Clover. Yours very truly,

SUCCESSFUL FARMING, A. H. Snyder, Associate Editor.

A Few Facts Worth Knowing About the King of Legumes

1. Sweet Clover will produce a greater cash income per acre than any other crop.
2. It is the greatest soil builder known, not only because of its ability to take nitrogen from the air and store it in the nodules on its roots, but because of the large amount of humus added to the soil from the decay of its roots.
3. Sweet Clover will grow in soils too low in humus content for any other legumes.
4. The large roots of Sweet Clover facilitate drainage and do much to break up and improve the texture of the soil lying below the reach of the plow; as the roots rapidly decay, the effect is immediate.
5. It cannot be equalled for pasture. It will not only stand more close pasturing but it does not bloat sheep and cattle as do the other Clovers and Alfalfa.
6. It will give a better and greater hay crop on the majority of farms than any other crop you can raise.
7. It is much easier to secure a stand of Sweet Clover than of Alfalfa.
8. It is the most valuable green manure crop you can grow.
9. The roots decay very rapidly after being plowed up and add a large amount of plant food to the soil.
10. It has more uses than probably any other Clover grown.
11. As a food for bees it has no equal. It has been grown for this purpose for a great many years, particularly in the Southern States.
12. It is gradually becoming recognized as the great American legume and is gaining recognition in all parts of the Country.
13. Sweet Clover is especially valuable to the dairy man either for hay, pasture, or as an ensilage crop.
14. There is no greater crop that can be grown for hogs or young pigs.
15. It will thrive on one-half the rainfall necessary for other legumes.
16. Sweet Clover is useful not only for reclaiming run down farms, but for new and undeveloped lands.

Have You Included Sweet Clover In Your Order?

If you have not included any Sweet Clover in your order this year, by all means do so. It is the cheapest means of building up your farm. Don't overlook the advantages of growing it, for it certainly is one of the greatest crops that you could grow. We are the largest handlers of this seed east of the Mississippi River and are in a position to save you money. If you are not growing this great crop by all means start doing so at once. It will produce you the finest pasture you have ever grown. The hay crop you secure will be the most nutritious you have ever grown. It will build up your farm faster than any other crop you can grow on it. You can't beat Sweet Clover. Better try it.

Sweet Clover

It will Make a Crop for you on Land Where Nothing Else Will Grow

Sweet Clover the Greatest Soil Builder Known

On account of the extreme root development of the Sweet Clover, enormous quantities of plant food are added to your soil from the root system alone; and it has been estimated that about twenty tons of green manure is secured from the root system of a Sweet Clover crop. Sweet Clover is one of the greatest cover crops ever grown, as it not only prevents the soil from gulleys and washing, but it takes up large quantities of potassium and phosphorus which would leak out of the soil during the winter and stores it in the root system where it becomes deposited in the surface soil and becomes available plant food for other crops when the roots decay. You cannot afford to not sow some of this great soil builder upon your farm, for no crop rotation is complete without it, and since you can now secure Scarified Seed it makes it very easy to secure a stand, and you should at least sow a few acres this year.

Sweet Clover as a Hay Crop

Sweet Clover is rapidly coming into favor as a feed for all classes of livestock, and is especially desirable for growing under conditions where other kinds of hay cannot be grown. Sweet Clover will grow on almost any soil and under the most adverse conditions, for it resists drought better than any of the other legumes and its ability to pull through a dry spell during the first summer, enabling one to secure a stand when other legumes would be a failure is a feature that should not be overlooked. When selecting a legume to sow upon your farm this year, especially if you have been having trouble securing a stand of clover on account of the hot, dry weather after the grain crop has been removed, try Sweet Clover, for, if you sow Sweet Clover, the seed of which has been scarified and inoculated, the young plants will have such a start by the time the grain crop is removed that the hot dry weather will have but little effect upon them.

Sweet Clover as a Pasture Crop

Sweet Clover makes excellent pasture for horses, sheep, cattle and hogs, and produces the first green bite in the spring and thrives well during the midsummer drought, enabling one to keep a larger number of animals on a more limited acreage than with any other pasture crop.

There is very little danger of bloating when stock are being pastured upon Sweet Clover, and this fact makes it very desirable as a pasture crop, in fact, much better than Alfalfa.

Until recently Sweet Clover was a despised roadside weed—now it is next to alfalfa in popularity and favor, especially as a pasture and soil-building crop. It is safe to say that the "finding" of Sweet Clover will make an epoch in farming, especially as a pasture for livestock. For many reasons it is particularly adapted to this region. It will grow when and where nothing else will — on dry, hard gumbo, wet, alkali, stony, sandy or any other kind of soil. If you have not tried sweet clover it may be just what you want.

Many are of the opinion that sweet clover sown on the quack grass or thistle fields and heavily pastured and mowed will be found a practical and profitable means of overcoming the loss caused by these pests. The sweet clover will build up the soil and enable other crops at least to do much better. It is worth a try.

Sweet Clover as a Silage Crop

Sweet Clover is becoming one of the most popular silage crops that can be grown. It can be used alone or mixed with other crops. The silage made from Sweet Clover will keep better than that made from other legumes as it does not become slimy as is so often the case with red clover or alfalfa silage. It produces a palatable feed which contains more protein than corn silage. The first crop alone will produce two-thirds as much silage as a crop of corn and the second crop will produce as much silage as a corn crop. Hence, you will obtain approximately twice as much silage per acre from Sweet Clover as you would from corn. The silage is of better quality and you are building up your farm instead of using up the fertility that is already there. Use Sweet Clover for silage and you will use no other.

Marshall, Va., May 14, 1920.

Dear Sirs:—Just a word to let you know that I have received my order of sweet clover all O. K. I am well pleased with it.

B. H. WILLIAMS, R. No. 1.



The Crop That Outyields All Others.

Sweet Clover a Big Asset to Any Farm

We know of no crop that will add the same amount of value to a farm that a crop of Sweet Clover will. It can be utilized as a feed for all kinds of stock. It contains a relative high percentage of protein thus making it a source of the most valuable constituent of feeds needed for growing stock and for the production of milk.

Unlike many legumes Sweet Clover will make a good growth on soils too depleted in humus for profitable crop production. In addition to its ability to grow and produce a quantity of forage on such soils, it will add much humus to them. The extensive root systems do much toward breaking up the subsoil providing better aeration and drainage. This is one of the reasons why Sweet Clover benefits land so much more than other legumes. These root systems soon decay after the plant is two years old providing better drainage and adding large quantities of humus to the soil.

The ability of Sweet Clover to reclaim abandoned run-down land cannot be equalled. Many farms that were so depleted in nitrogen and humus by continuous cropping with non-leguminous crops that they were abandoned have been brought back in a remarkably short time to productive farms.

In those sections where the soils are low in humus, it is to be strongly recommended that Sweet Clover be grown for green manure. This method of building up the land is being practiced in many sections with excellent results. We know of no crop that can be grown on the farm that will add to the value of the farm what Sweet Clover will. The nice thing about Sweet Clover is that it not only increases the value of the farm, but it pays big while doing it.

Rossville, Ill., April 1, 1920.

Gentlemen:—You received an order for seed from me through the Farmers National Bank for sweet clover seed. It arrived O. K. and I am well pleased with the quality.

MARK RUTH

Varieties of Sweet Clover

White Blossom Biennial *Melilotus Alba*

This is the most popular and most common variety known. It is a biennial the same as Red Clover and there isn't a farm in the United States upon which it cannot be grown with profit. It meets a long felt want for a legume which will thrive on the poor soil and under adverse climatic conditions. One of the strongest recommendations in favor of Sweet Clover is that it will produce enormous quantities of succulent pasturage, and that cattle and sheep will not bloat upon it. Because of the fact that Sweet Clover can be pastured in the humid sections whether it be wet or dry, makes it more desirable than Alfalfa as a pasture crop.

The seed crop of the White Blossom makes it a very profitable crop for it not only sells for a good price, but yields extremely well. Yields of from four to eight bushels per acre are not at all uncommon.

Because of the fact that the seed of the White Blossom Sweet Clover brings a much higher price than either of the Yellow Blossom varieties, be sure that firms who quote you on cheaper seed than we are listing are supplying you with the pure and unadulterated White Blossom Sweet Clover, and also beware of seed which contains noxious weeds, for the highest quality seed is what you want when you are sowing White Blossom Sweet Clover. Because of the fact that in some sections, especially in the humid regions Sweet Clover is placed upon the market in the unhulled state, and to the fact that unless the seed and the straw contain no moisture whatever at the time of threshing, it is very hard to separate the seed from the hull, and for these reasons we handle both the hulled and unhulled Sweet Clover. See green list for prices.

Yellow Blossom Biennial Sweet Clover

This variety does not grow quite as large as the White Blossom Sweet Clover, and for that reason it is not so desirable for fertilizing purposes. It is more spreading in nature, and not as heavy a yielder. The seed is much cheaper than that of the White Blossom variety; and we can save you money if you wish to sow it. There is more of this variety of Sweet Clover being sown every year, which leads us to believe that it is becoming more popular, and although we do not recommend the sowing of it in preference to White Blossom Clover, we feel that there is considerable merit to this variety, and do not hesitate to recommend it especially for pasture and hay. Our seed is of the very finest variety and has all been scarified, and we feel sure it will please you. See green list for prices.

Yellow Blossom Annual Sweet Clover

This variety of Sweet Clover is used almost exclusively as a fertilizing crop, being sown with small grain in the spring and plowed under in the fall. Because of its quick growing characteristics, it has become quite popular for this purpose, and is used by many for inoculating land before seeding to Alfalfa. The seed is much cheaper than the White Blossom variety and is being used quite extensively. It is also sown to some extent in the extreme Southern States where it lives through the winter. We have a very nice lot of this seed on hand which shows a high purity test, and we know that it will, if properly inoculated, meet your wants for a quick growing, hardy legume to plow under this fall. See green list for prices.

The Facts Regarding Unhulled Sweet Clover

There are probably more misunderstandings regarding the Unhulled grade of Sweet Clover than any other. One of the chief points that does not seem to be clear is that many, when ordering the unhulled seed, expect 60 pounds to the bushel while the facts are that there are only 30 pounds to the bushel of unhulled seed and we sell it on that basis.

Another thing that does not seem to be clear is that the unhulled seed is not scarified. Another question that is asked us frequently is, "What time of the year should we sow the unhulled seed and when the hulled scarified seed?" In answer to this we would say that for winter or early spring seeding the unhulled seed will give you good results but do not sow it after the freezing weather is over. In many sections of the south the unhulled seed is sown during the winter months and even in sections where it does not freeze they seem to get good results; but for the average middle western conditions we would only advise sowing the unhulled seed in cases when you sow your seed on the snow or early in the spring on top of the ground during the freezing and thawing weather. In such cases the seed coat is cracked by the freezing and thawing and you will get good results and save some money on your seed for you can buy the unhulled seed much cheaper than the hulled seed. See price list for quotations on the Unhulled Sweet Clover.



Note the Height of This Sweet Clover Plant Taken from a Field on June 18th.

Why You Should Buy Your Sweet Clover from the American Mutual Seed Co.

We are large handlers of Sweet Clover Seed, and as we make a specialty of Sweet Clover, we are in a better position to serve you than those who do not handle as large quantities as we do. Buying in large quantities enables us to make you very close prices. We make a specialty of Sweet Clover and being in close touch with the growers in the principal producing sections enables us to buy up this seed to advantage and furnish it to you at a very low price. Our cleaning machinery is especially adapted to handling Sweet Clover and this enables us to get your seed up for you in the best possible shape.

Be sure and take up the question of Sweet Clover with us in buying your spring requirements of seed, for a few acres in Sweet Clover will certainly make you more money than any crop you could grow.

Sow Scarified Seed

It is absolutely essential in order to secure a stand of Sweet Clover to sow Scarified Seed. Numerous experiments have shown that from 40 to 80 per cent of Sweet Clover seed will not germinate because of the seed coat being so hard that the moisture cannot penetrate it.

Professor Hughes, of the Iowa Station, has perfected a scarifying machine by means of which Sweet Clover and other legumes having hard seed coats are so treated that moisture may gain access to the embryo of the seed and cause it to germinate more readily. Our plant is equipped with one of these scarifying machines, which places us in a position to offer you nothing but Scarified Sweet Clover seed, and when you take into consideration the fact that from 40 to 80 per cent of the Sweet Clover seed sown does not germinate, you can readily figure the advantages to be gained by sowing only our Scarified Seed. Remember, in ordering Sweet Clover seed that the American Mutual Seed Company will ship you nothing but scarified seed. The placing of this scarified seed upon the market, we believe, will completely revolutionize the farming business, for it will enable the farmer to secure stands of this wonderful crop so easily that you will find but few run down, impoverished farms, while in the case of former years the farmer has because of his inability to get a stand of the different legumes, been forced to crop his farm until it has become low in plant food.

Soy Beans

A Crop That Will Bring You Wonderful Returns

No crop has increased in popularity in recent years more rapidly than the Soy Bean, and it is rapidly becoming one of the most profitable crops which can be grown throughout the Corn Belt. It was formerly thought that it could not be grown only in a limited territory, but the result of the numerous tests by the several State experimental stations and the United States Department of Agriculture has proven that Soy Beans may be grown over a much greater area than was at first supposed possible.

Generally speaking, the Soy Bean requires the same temperature as corn. Soy Beans are wonderful soil improvers; they belong to the family of legumes, therefore have the power of taking nitrogen from the air and storing this most valuable of all plant foods in the nodules on its roots, thereby leaving the soil upon which they were grown in a higher state of productivity for the ensuing crop than it was before.

Soy Beans may be utilized either as a soiling crop, pasture crop, hay crop or grown for seed. As a soiling crop for cows, no crop surpasses them for producing a high yield of milk. Hogs turned into a patch of Soy Beans as the beans are commencing to form will make a phenomenal growth. The Soy Beans will produce under favorable conditions 12 to 13 tons of fresh fodder per acre, containing large amounts of crude protein and fat, which makes an excellent forage to mix in with corn fodder or some forage plant high in carbohydrate but low in protein.

If grown for seed this crop will produce from 25 to 40 bushels per acre of the most concentrated food stuff that can be produced upon the farm, and the ground seed is equal pound for pound with oil meal in feeding value, and it is claimed that butter made from cows fed this meal has an exceedingly fine texture and flavor.

Soy Beans are used quite extensively in connection with cow peas, for when the two are grown together they support the cow pea and greatly facilitate the harvesting and curing of the crop. They are very drought resistant, and seem to thrive well during the hot dry weather of the summer months, and produce an abundance of succulent and nutritious feed at a time when pastures are dry and brown.

No farmer can afford to be without a limited acreage of this most valuable crop, for when he can produce a food stuff right on his own farm that is in every way equal if not superior to the most concentrated commercial feeding stuff upon the market, it seems like folly to pay out money for commercial feed when Soy Beans can be grown so easily.

Soy Beans the Greatest Crop You Can Grow

The growing of Soy Beans has long since passed the experimental stage. Their adaptation to all parts of the country, and their value and place in agriculture, apparently surpassing all other legumes, has been determined. Their high feeding value and their usefulness as soil improvers make them valuable additions to our list of field crops and they merit a hearty welcome from every farmer. You can surely find a few acres of your farm which you can sow to Soy Beans. You will not be disappointed in the results for they not only furnish the richest feed, but also improve your land while producing it.

How Soy Beans are Handled in the Corn Belt

Most farmers here in the Corn Belt follow the practice of growing Soy Beans with their corn. They are planted at the same time the corn is planted by putting on an attachment to the planter that drops the beans in the hill with the corn. They do not interfere in any way with the cultivation of the corn and at harvest time you have two crops instead of one. They may be either harvested with the corn and put in the silo or you can turn the sheep or hogs in the corn and let them clean up the beans. You will find that neither sheep nor hogs will bother the corn much until they have cleaned up the beans. When first turned into the field they will eat the soy bean leaves first, then start in on the beans and pods. After the beans have been cleaned up the pigs or sheep, as the case may be, will commence on the corn, but up to the time the beans are cleaned up they will do but little damage to the corn.

Seed Received in Good Shape.

St. Anthony, Ind., April 5.

Dear Sirs:—I received my clover seed today and am well pleased with it. The bag is in good condition and the weight is correct. The seed is very nice.

SEP BATH.



A Soy Bean Plant Just as the Pods Are Forming.

A Few Facts on Soy Beans

1. They make one of the best protein forage feeds for cattle.
2. They build up the soil like clover and nothing beats them for a green manure crop.
3. They are not particular as to the kind of soil. They make a satisfactory growth on poor soils if inoculated.
4. Soy beans will grow on an acid soil that will not produce clover.
5. They can be grown as far north as corn, as far south as cotton.
6. They may be planted over a period of from early spring until midsummer.
7. They will resist drought as well as any crop we know of.
8. They are the most satisfactory crop to use in a short rotation. They may be used as a whole season crop as with corn, or they may be used as a part season crop following small grain.
9. Soy Beans should be sown at the rate of from 20 to 30 pounds to the acre when drilled and 60 to 75 pounds to the acre when broadcasted.
10. They may be cut for hay any time after the pods begin to form.
11. Soy Bean hay contains more digestible nutriment and more carbohydrates than any other hay.
12. They will make from 2 to 5 tons of silage per acre.
13. Use one ton of Soy Beans to two tons of corn and it will produce the finest silage you have ever fed.
14. Soy Beans are equal, pound for pound, to oil meal in feeding value.
15. Soy Beans are especially desirable for feeding dairy cows, and a better grade butter can be made when feeding Soy Beans than from any other feed.

Tryonville, Pa. Pa.

Gentlemen:—Order No. 24637 of grass seed has been received in good shape. I found the seed as it was represented to be and am perfectly satisfied with it. Thanking you for your promptness in looking after it.

Respectfully,

H. L. BLY, Rte. 2.

S. D. Strawbridge, Rte. 2.

Varieties

Mammoth Yellow

This is a late maturing variety and will not mature seed north of the Ohio River. It is a very popular variety for growing, however, in the Central States, for forage and ensilage purposes. It produces a large growth of vines which makes it a very desirable variety to plow under. This variety is proving very popular for growing in Illinois and Wisconsin for ensilage purposes because of the heavy tonnage that can be grown per acre. Owing to unsettled market we are unable to quote firm prices. See list.

Medium Early Yellow

This variety is a very popular one for growing throughout the Central States, as it matures earlier than the Mammoth Yellow. It does not, however, produce as much forage, but it produces quite a heavy crop of Beans, which makes it a very desirable variety to grow. This variety is undoubtedly the most popular variety, as approximately 75% of our orders are for this variety of Soy Beans. From all sections of the country come nothing but words of praise for this popular variety. Owing to unsettled market we are unable to quote firm prices. See list.

Ito San

This is an old standard variety which is quite early and one of the best sorts grown. It is especially adapted to a Northern latitude, and a very heavy yielder of beans, but it does not produce the forage that some of the later varieties do. It matures in about 110 days. This variety has been grown in this latitude for many years and is one of the reliable varieties that always produce a crop. We are extensive handlers of this variety of Soy Beans and are always in a position to furnish you with the highest quality of seed stock. See list.

Early Brown

This variety of Early Soys is one of the most popular varieties. They can be grown successfully in any state in the Union and for those wishing a bean that will mature as far north as Minneapolis we want to recommend the Early Brown. See list.

Hollybrook

This is one of the standard varieties and will mature anywhere in the corn belt. It matures in about 120 days, growing about 36 inches tall. It is a heavy producer of seed and hay and is desirable to plant with corn for hogging down purposes. See list.

Black Ebony

These beans withstand cold, wet weather in the early stages of their growth better than the yellow beans. They have fine stems and leaves and are very desirable for hay and for silage. The yellow beans are more desirable for hogging down as the hogs cannot find the black beans. These beans are grown extensively here in Illinois and we are in a position to furnish you the very best of seed stock. Owing to unsettled market we are unable to quote firm prices. See list.

GROWING THE CROP

Soil. Soil requirements are much the same as those of corn, although Soy Beans will make a very satisfactory growth on poorer soil than will corn if the seed is properly inoculated. It is not necessary to have a well drained soil, but the water should not stand on the ground for any considerable length of time.

Preparation of Seed Bed. The ground should be well prepared so that the weeds will not be likely to choke out the young plants, and so as to facilitate the development of a good root system.

Seeding. In growing the crop for seed, one-half bushel of seed should be planted per acre. The seed should be planted in rows the same as corn, with a plant on an average of every three inches in a row. When sown broadcast or in drills a bushel to a bushel and one-half are sown per acre. Soy Beans may be planted quite early in the season, but the best results will be obtained if the seeding is postponed until the ground has become thoroughly warm. In case some of the earlier varieties are used seeding may be delayed until after some of the earlier smaller grains have been harvested, making it possible to prepare the ground and secure two crops from the same land in one year, and yet leave the land in better condition than it was before. Another practice is to drill the



Soy Beans In Corn Make the Greatest Combination You Can Grow.

Beans in between the rows after the last plowing. The best method of seeding depends upon what kind of a crop one desires to harvest.

Tillage. When the seed has been drilled in rows together or has been sown broadcast, very little cultivation is necessary. Many follow the practice of using a light harrow after seeding on land that is a little foul, as the weeds are liable to get such a start that they will interfere with the growth of the young plants. In case Soy Beans have been planted in rows on ground inclined to bake or pack, it should be stirred after each rain. Care should be taken not to work the field when the plants are wet with dew or rain.

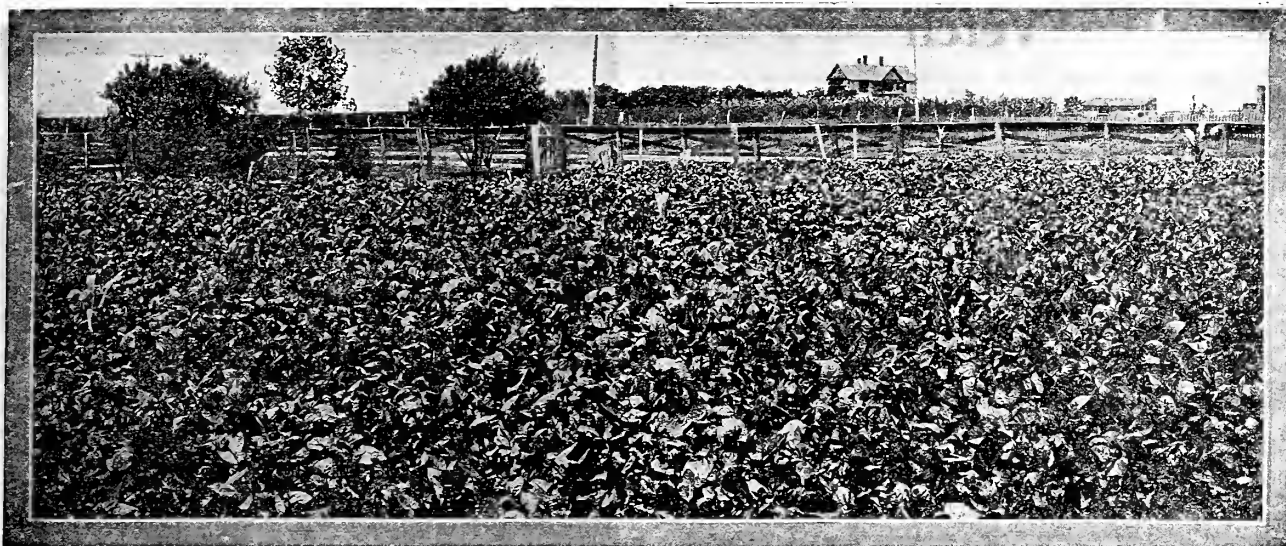
Harvesting. The time for harvesting the Soy Bean crop will depend somewhat upon the use that is to be made of it. The chemical analysis shows that the plants cut when pods are well developed contain larger amounts of protein and fat than those cut at earlier stages, but from feeding experiments it seems that more of the plant will be eaten when cut in the earlier stages. Considering palatability and digestibility, as well as chemical composition it is probable that the best forage will be obtained just when the pods are forming. If used for soiling purposes begin cutting just as the plants are commencing to bloom. If used for hay, when the plants are in full bloom and when the pods just start to form. Soy Bean hay cut at this time is almost identical in feeding value with alfalfa, and for using in connection with corn for silage cannot be beaten. If harvested for the seed crop alone, the harvesting can be facilitated by allowing the crop to stand until most of the leaves have fallen, and sometimes this is the most desirable method. Our seed stock is of the very highest quality and has been furnished us by the very best growers in the business. We also keep on hand at all times Pure Culture Soy Bean Bacteria, which we can furnish you at a minimum cost, and will be glad to give you any further information which you may desire on growing this great soil building crop.

Appreciates Our Service.

Scobey, Mont., May 2.

I received your appreciating letter in which there was a check for \$7.29 for which I thank you very much. Your memory will be greatly appreciated.

EUGENE W. PRUTTIS.



This Crop Improves the Soil and Produces the Best of Feed.

Cow Peas

Closely allied with Soy Beans and ranking along with Clover as one of the greatest soil builders known is Cow Peas. In fact, this crop is the greatest soil renovator known. No other crop will build up a depleted soil as quickly as Cow Peas. They penetrate the subsoil when it is an impossibility to secure a stand of Clover or Alfalfa, and because of their ability to do this, have proved of great value in certain sections. Cow Peas not only gather nitrogen from the air and store it in the tubercles on its roots in the soil, thereby increasing the nitrogen content of the soil, but they bring up the potash and phosphorus from the lower stratas of soil and incorporate these elements of fertility in their plant cells where they become available for the succeeding crops. Cow Peas are without a doubt the best crop that can be grown to plow under for a green manure crop, and when used in this way, quicker results can be obtained than by any other method of crop rotation.

Cow Peas Rich in Food Value

Cow Peas are the most nutritious of feeds and can be utilized in many ways. The most common practice followed by stockmen however, is to pasture them off with hogs or cattle, cut and feed the hay or use for silage.

Cow Pea hay is a very nutritious feed and is relished by all kinds of live stock. It is very nearly identical to wheat bran in chemical composition and is one of the most valuable of roughages known for balancing the feeding ration. It is especially valuable from a milk producing standpoint.

The peas are very much relished by hogs and sheep, and being high in protein are most valuable for feeding young and growing stock. A very popular practice followed is to allow the peas to reach the ripening stage and then turn in the stock and allow them to clean them up.

Cow Peas when cut green and placed in the silo with corn greatly increase the palatability of the silage as well as increasing the feeding value, and as the two crops usually mature about the same time, they may be used in combination and produce the best silage you can secure.

Cow Peas Make a Great Crop When Grown with Corn

Cow Peas can be grown to an advantage with the corn crop, and you can secure an attachment for your planter that will drop two or three peas in each hill of corn. You can by following this practice grow two crops where only one grew before, and grow better corn than if your cow peas were not present. The best way to utilize these two crops is to cut them and put them in the silo or turn in the young pigs and lambs and they will eat the peas and you can harvest the corn crop in the usual way. We have followed the practice on our own farms, of growing cow peas with the corn, and we know of no crops that produce the revenues that these crops will when grown in this way.

A Mistaken Idea

Many have formed the idea that the cow pea is only adapted to the Southern States, and this is not the case. While the cow pea is cultivated extensively in the Southern States and

has been the means of building up and reclaiming the South from the one crop system, they are of equal value right here in the corn belt, and early maturing varieties like the New Era can be grown successfully much farther north.

Varieties of Cow Peas

WHIP-POOR-WILL. This is a medium early maturing variety which gives most excellent results. They produce a brown-speckled, medium-sized pea and are a very prolific seed yielder. When planted in corn about one bushel to the acre is usually sown, but when sown for hay from one and one-half to two bushels are used.

See price list enclosed.

NEW ERA COW PEAS. This is the earliest variety of Cow Peas grown. It matures in about 75 days. It is very easily handled by machinery, which is a strong point in recommending it to the farmer of the corn belt. It will also make a crop when sown in the stubble after small grain. They make splendid hay, and as the vines are somewhat smaller than the later varieties they are more easily cured. No farmer can afford to be without at least a few New Eras, for there is room on every farm for a few of them to be grown at a profit. No crop rotation is complete without them. The peas are somewhat small in size and you will find a bushel per acre will be ample seed. See price list enclosed.

BLACK EYE COW PEAS. This variety of Cow Peas is very much in demand at present as they are being used in large quantities for canning purposes. The plants grow in a bush shape and hold the peas off the ground quite well. These peas are used in the South by market gardeners for selling green. The seed of this variety is very short this year and if you intend sowing any we would urge upon you to place your order at once. See price list for latest quotation.

MIXED COW PEAS. A large quantity of the Cow Peas that come upon the market are mixed, and composed of different varieties, which have been grown together or have been mixed in transit or country points. These consequently do not sell for as high a price as the straight varieties of Cow Peas, but they will produce a heavy growth of forage and are invaluable for plowing under for soil improving purposes. We have quite a quantity of these on hand and are able to offer them at a very reasonable price.

GROWING THE CROP

SOIL—Cow Peas will grow and thrive on soils where other field crops would die, although they will grow better on rich soil. They produce an excessive vine in proportion to the seed. A sandy or light clay loam is considered the best for seed production.

SEEDING—The rate of seeding per acre varies according to the variety used, but the usual plan followed is a bushel for the late varieties and a bushel and one-half of the medium early, two bushels for the New Eras, and two or three bushels of the Canadian Field. They are usually put in with a grain drill and with every other spout plugged up, but are sometimes sown in wider rows with a corn planter, and given two or three cultivations, especially when grown for seed.

HARVESTING—Cow Peas should be cut for hay when most of the pods are full grown and commencing to turn. They should be cut and placed in small piles and allowed to remain in the field for four or five days until thoroughly dry. They then produce hay of finest quality.

Vetch

For soil improvement there is hardly any crop that fits in so well under all conditions as Vetch. It is a heavy carrier of root tubercles and these increase more in cold weather on Vetch than any other legume. It will grow and enrich the soil during fall, winter and early spring, and in many sections of the South it produces an enormous crop during winter months when other crops would be dormant.

Vetch will do well on poor lands where clover will fail. It needs a good seed bed with plenty of moisture to begin with, but after once established it will stand most any degree of heat, cold or drought. Like all leguminous crops, Vetch gathers nitrogen out of the air and deposits it in the tubercles on its roots. In order to carry out this process it is necessary that the seed be inoculated or the young plants will not grow as healthy and vigorous as otherwise. Although many of our customers report they are able to grow a crop without inoculating, it seems that one is taking chances when inoculating can be done easily with the pure culture method.

The Greatest Soil Builder Known

The demand for an early spring forage crop is increasing in almost every section of the United States. The Vetches are rapidly becoming popular for this purpose as the farmers are coming to know of their great value. They supply a very succulent forage from early spring until late autumn, and they will remain green under the snow all winter and furnish the first green bite in late winter and early spring, which time is always a critical period in live stock management. There is always a time, during this period when the fodder and other dry forage crops do not satisfy the appetites of the farm animals. It is to bridge over this critical period that the Vetches have become such a valuable addition to the food stuffs of the live stock farmer. The Vetches are nitrogen gatherers like Clover. They are also useful because they form an early mulch in the spring and early summer, shading the ground and preventing the growth of weeds. They retard the loss of valuable plant food that is going on wherever the soil is left bare and unprotected.

We want you to know that we are enthusiastic over this crop, not because we have seed to sell, but because we believe that a more profitable system of farming can be produced by growing Vetch in the crop rotation than any other method. We only wish we might in some way place the good qualities of this crop before you so you would recognize its most extraordinary qualifications, a crop which you can sow on any kind of soil, and it will not only produce a heavy cutting of the most palatable forage known, but furnish green forage at a time when it bridges over the most critical period for the live stock farmer.

WINTER OR HAIRY VETCH. Hairy Vetch withstands winter's cold and summer's drouth. Plant at least an acre of it this season. It will not disappoint you, for it is unquestionably one of the greatest fertilizers and soil builders ever offered to the American farmer, and we believe that it is to the farmer of the Northwest what the Cow Pea has been to the farmer of the Southern States, and we know you will be well pleased with it.

PRICE—See Green List for Prices.

SPRING VETCH. Spring Vetch is a nutritious crop, and there is an ever increasing demand for it, as farmers come to realize the importance of the Vetch crop. Spring Vetch is used for much the same purpose as the Hairy Vetch, but it will not thrive on poor soil or withstand the extremes of weather so successfully. When seeded with oats a bushel of each should be sown.

See green list for lowest quotations.

Saves Twenty-five per cent on Grass Seed Bill.

Received your grass seed last week, and I saved 25% on my grass seed bill this year. **ABIL LEVASSEER, R. No. 6.**

Seeds Arrive O. K.

Seeds arrived yesterday all O. K. **Sharon, Conn., April 19.**

MRS. MARY R. JACKSON.

She Says, "They are Fine."

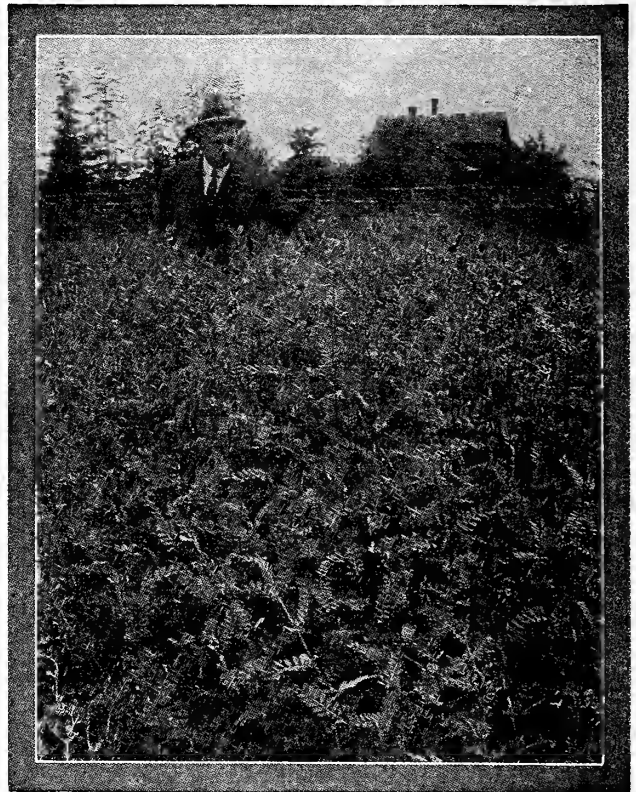
Sterling, Va., March 29.

Potatoes arrived O. K. and in good condition. "They are fine." **MRS. L. F. MYERS.**

Seeds All in Good Shape.

Perryman, Md., April 9.

The ten bushels of seed came in this morning in good shape. Thanks. **PHILLIPS M. HALL.**



- Vetch—The Greatest Soil Builder of All.

Canadian Field Peas

This is a variety of peas grown all through the North, and Northwestern parts of the United States and also in Canada. They are becoming more popular each year as they have such a wide range of uses, and are so hardy that they do well on any soil adapted to oats or Spring Wheat.

It is a very popular practice to sow them with oats at the rate of two and one-half bushels of peas and two bushels of oats. By so doing a double crop can be secured. It can be threshed at one time and separated with a cleaner. Thousands and thousands of head of sheep are fattened each year throughout the irrigated sections of Idaho, Montana, Colorado and Wyoming on this crop by just turning the sheep into the field as the peas commence to ripen.

They can be grown alone for fodder purposes and green manure but for a dairy feed it is far more profitable to mix them with oats, rye or barley. The best time to cut for hay is just when the oats is heading out. This hay is of the highest quality and extremely nutritious. Cattle, horses and sheep thrive on it and it will surprise you how much of it will be produced on a small acreage.

As a fertilizer plowed under when just coming into bloom, Canadian Field Peas stand next to Red Clover. They take the much needed nitrogen out of the air and store it in their roots. This pea has a high germinating power and will germinate at a low temperature so it is well to plant them fairly deep, say four inches and then sow the oats and harrow. This will make green forage or hay to be cut in June or harvested and threshed together and used as ground feed.

This seed has become so popular the last few years that it has caused us to pay special attention to it, and this year we have a stock of exceptionally nice pure seed. It is always best with peas to know that the seed you are getting is pure and comes from good northern stock.

Do not fail to place an order early for some of this seed as we know of no other crop that we can recommend for the Northern States as Canadian Field Peas.

We know our seed will please you. Place your order early and insure getting some of the fancy stock we have. Once you start with Canadian Field Peas you will never be without them.

Timothy

Timothy leads all grasses in our Country. It is so called after Timothy Hansen who introduced it in America in 1720. As a hay crop it has long been the standard and is adapted to a wider range of conditions and is grown over a wider area than any of our cultivated grasses. In the United States it comprises three-fourths of the area devoted to tame grasses. It is grown principally in that section of the Country north of the Ohio and Potomac Rivers and east to the Missouri River, and does not thrive in the hot climate of the South and the arid regions of the West, but is quite extensively grown in the mountain valleys of the Northwest.

No other variety of the tame grasses will stand the extremes of climate or begin to compare with it in average yields or feeding value. It is a short lived perennial, heavy for its bulk and produces one of the best qualities of hay. It stools out and forms compact stools of broad leaves which give the hay its quality. It does not produce creeping stems or runners.

Value for Feeding

Timothy Hay is very palatable, easily cured and can be preserved for a long time. Timothy hay always sells for a premium on the market as it is very nourishing, being greedily eaten by cattle, and especially by horses. It leads as a horse hay. The feeding value is more or less influenced by the time of cutting. It is high in carbohydrates, but low in protein, but when mixed with some of the Clovers produces one of the very best roughages for livestock as it is very palatable, rich, free from dust, and easily digested. On average soils it is commonly sown with the Mammoth, Medium Red, or Alsike Clovers, but on lower soils nearly always with Alsike.

For pasturing it should be mixed with other grasses as close pasturing is injurious to it although it is adapted to most soils and seldom fails to make a stand on prairie soils.

Easiest and Cheapest Hay Crop

Timothy can be raised with less labor than any other hay crop. During the war when labor was scarce and many farmers were alone, Timothy was grown at a big advantage. Conditions have not changed a great deal yet and an increased number of farmers will be putting in Timothy this spring. With good farm help scarce, and at a high price, raising Timothy is a wise thing to do.

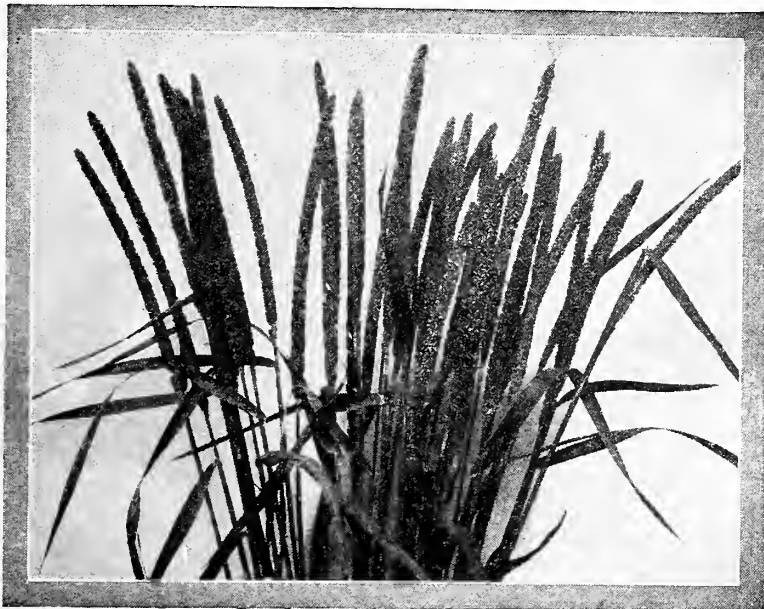
Timothy hay is made easier than any other hay and at the same time there is less waste and risk in handling it. Timothy hay cures very quickly and easily and can be put in the barn quicker than any other hay. This decreases the risk of having hay spoiled in damp weather. It is usually cut in July when it is much easier to cure than if it were cut in June, as that month averages more days of rainfall.

The time of cutting is not so exact as with other hay so that the haying season may be prolonged without causing any great material change in the quality of the hay. The hay too, may be stored longer without any material difference.

It has been found at the Missouri Experiment Station that when hay is cut just after the seed is formed, cattle will eat it in preference to earlier and later cuttings. There is not a great deal of difference in the food nutrients, as the nitrogen in the plant tends to decrease as it gets riper. With horses, practical experiments show but little difference. With a favorable season it appears that the best time to cut hay would be in the dough stage just after the seed forms.

It takes less investment in labor and seed to put in Timothy than any other hay. Less labor is required the whole season through and the price of the seed is from a third to a fourth less than others. With labor high and other seeds high, a man can save his money by putting in Timothy. The hay, too, is always the standard and out-sells other hay on the market. It is always preferred in city trade.

This year above all others, should be a year when one will make money by raising Timothy. There are thousands of acres in our Country that are growing mainly weeds and a few native grasses. With a few cents spent in Timothy seed, dollars would be reaped.



A Field of Timothy with Heads Like This Will Produce Almost as Much Seed as a Grain Crop Will Grow.

GROWING THE CROP

Soil. Timothy grows best on moist loams and clays rich in humus. The soil should be finely pulverized as the seed, which is very small, should not be covered too deeply.

Seeding. Timothy may be sown in the fall or spring. Fall seeding is extensively practiced and the general custom is to sow Timothy on the stubble in the fall and follow with a good harrowing, or else sow it with a crop of fall wheat. The advantages of fall sown Timothy on the stubble are: Timothy does not have to contend with the weeds or the nurse crop, and it makes a much heavier growth than Timothy sown with a grain crop the next spring, and produces a good hay crop and some fall pasture the following year. The seed should be sown quite early in the fall in order that the plants may get a good start before frost. Clover is generally added in the spring when the ground is frozen and honey-combed with cracks.

Harvesting. Timothy has the highest feeding value when it is in what is known as the "second bloom" stage. At this time the seed is in a dough. If it is to be used for home consumption it should be cut at this time, but if it is to be sold to the city trade it should be allowed to ripen a little more. Timothy hay cures quickly and should not remain in the swath more than a day in good haying weather.

In many sections Timothy is cut for seed, which is most generally quite a profitable manner of handling the crop, for although Timothy seed is not usually very high in price, it is a heavy yielder, and can be harvested without much expense.

Care of Timothy Meadows. Timothy meadows require careful treatment after the removal of the hay or seed crop. Although it is not difficult to secure a stand of Timothy, it takes quite a little work to maintain the meadow in a healthy and thriving condition, and owing to the nature of the plant, having a bulb-like enlargement at the base it will stand but little pasturing, as any injury to this bulb affects the next year's growth, as this is where the plant stores its plant food. It is a coarse feeder, and should be given a top dressing of manure quite frequently, and instances have been known where this process has doubled the yield. Do not cut your Timothy too close, as the root system will withstand the drought better and there will be less danger of it killing out if you leave plenty of stubble.

Good clean seed is the foundation of a perfect meadow. Insist on pure seed. It pays. Ask for samples and prices.

Secure Your Timothy from the Greatest Timothy Seed Market in the World

We are situated in the heart of the greatest Timothy seed producing section in the world. There is more Timothy handled in Chicago than in any other market in the world. This makes it possible for us to furnish your Timothy to you to advantage. Located as we are in the great terminal market often enables us to buy this seed at a favorable moment so that we can turn it to you at a price that will save you a lot of money.

Seedsmen from all over the world come to this market for Timothy seed. This fact we feel is the greatest recommendation that our Timothy seed could have. The Timothy seed grown in the producing sections adjacent to this market is known the world over as having the strongest viability of any Timothy seed produced.

We take great pride in being able to furnish our customers with the highest quality of Timothy seed. Better farming has created a demand for a quality of Timothy seed that is a careful selection of the best seed grown. In order to meet this demand we have spent our best efforts in producing our Pinnacle Brand Seed that we feel meets their requirements. If you have never seen any of our Pinnacle Brand Timothy be sure and ask for a sample this year.

We Handle Enormous Quantities of Timothy Seed

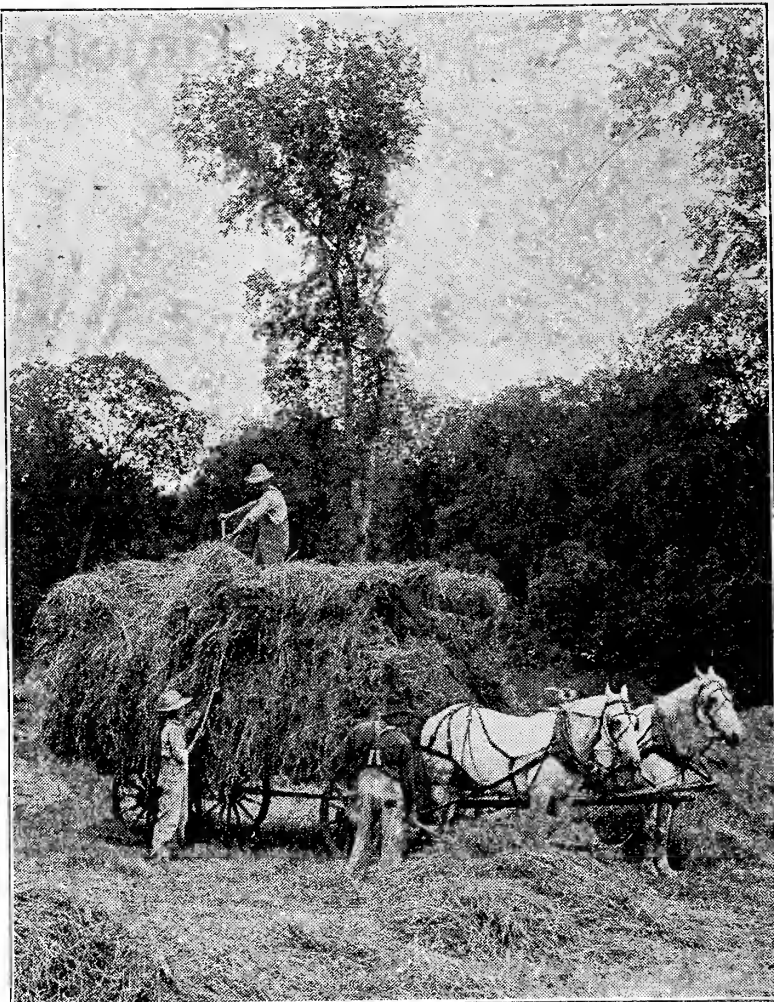
We have built up a phenomenal business in Timothy Seed. We are located just right to procure this seed for you to the best advantage, and hundreds of customers are taking advantage of the exceptional opportunities that we offer them to save money on their Timothy seed. Our plant is well equipped to handle a large quantity of Timothy at a minimum cost and this fact in itself makes it possible for us to make quite a saving for you on Timothy seed.

Timothy, One of the Cheapest Seedings You Can Handle

The price of Timothy Seed is very reasonable this year and there never was such an opportunity offered to make a liberal seeding of grass seed as we have this year. A good Timothy meadow is always a source of income. You never have a failure with timothy, for one year with another you will have fewer failures with timothy than with any other crop that we know of. Timothy is less susceptible to adverse weather conditions than most any other crop. It will stand a lot of hot dry weather. In fact, it is hard to conceive of conditions so bad that timothy will not make a fair crop. We feel that you will be making a mistake if you do not make a seeding of timothy this year and have the protection on a hay crop that a good timothy meadow give you

Real Value in Timothy Seed

There is a wide range of difference in seed qualities that makes it hard for one to determine values. We want all of our customers to examine out Timothy carefully until they are fully convinced of the big values we are offering them in Timothy seed. Keen and discriminating farmers know the difficulties of using questionable seed. The best seed is invariably the cheapest. Do not take any chances on your Timothy seed but sow our high grade cleaned seed and we know that you will never regret it. All of our seed is backed by our Absolute Guarantee. Your Money's Worth or Your Money Back. You must be satisfied with every pound of seed you get from us or it's no trade. We are not satisfied unless you are and do not want a penny of your money that you do not feel you secured big value for. Our seed must meet with your approval. It must come up to your ideas of good seed. You take it home, test it in any way you care to and then if you are not satisfied, return the seed and we refund you the money for the seed and the freight charges as well. You are protected when you buy your seed from us. Drop us a line and get our samples. We have real values for you.



Good Seed Means a Good Field.

Custer Park, Ill.

Gentlemen:—My clover and timothy seed and sower have arrived, both in good condition and are entirely satisfactory. Hoping all our future dealings will be the same and wishing your firm all success, I remain,

Very truly yours,
EARL M. YEATES.

What Our Customers Say About Our Timothy.

Squires, Mo., Sept. 6, 1920.

Gentlemen:—I must tell you how fine my timothy seed did that I got from you. I had a little of it thrashed and it is clear of other seeds. The timothy grew over five feet high and the heads 10 inches long. Please send me your prices on English Blue Grass, Orchard Grass and Red Top.

Yours truly,
WILL STANLEY.

Bishopville, Ohio, Sept. 29, 1920

Dear Sirs:—Please send me a price list of your grade of seeds and also of potatoes, corn, etc.

My clover seed I received from you last spring did fine for me, and I want to say for your timothy seed that it cannot be beat. Your seed potatoes yielded the best crop of potatoes for me that I have ever had in ml life. I can and will gladly recommend any of your goods as being first class, and the cheap prices can't be beat.

Yours truly,
ROY BROOKS.

Athens, Ill.

Gentlemen:—The timothy and alsike grass seed order No. 26767 has arrived in good condition and the seed is just fine.

Respectfully,
H. E. Mc CLINTICK.



Gold Mine Pork Producer.

Gold Mine Pork Producer

There is an ever increasing demand for a mixture that will produce a big crop of succulent feed and at the same time build up the soil. This demand is met in every way by this great combination and at a cost of less money than any crop that could possibly be used. It will produce more pounds of pork for less money than any other crop and at the same time build up the soil.

Why the Price is so Low

There are countless times during the year that we have opportunities to buy mixed clovers at a greatly reduced price, much cheaper than we could buy them separate. Many times clovers are grown in combination, many times they are mixed in elevators, and often they are mixed in shipping. There is practically every possible combination of clovers mixed every year, either by accident, or by being grown and threshed together. Red Clover with Alsike and Alfalfa with Sweet Clover are grown mixed, and threshed for seed in many localities. Red Clover and Crimson Clover are often grown together and sometimes Alfalfa is grown and threshed with Red Clover. Seed of mixtures can be bought to a better advantage than when separate. The average small dealer does not recognize the value of many lots of mixtures of seed and consequently we are able to buy and sell them at exceptionally low prices. Being located in the greatest terminal market in the world makes it possible for us to secure some wonderful bargains for you.

Money Making Pastures

We have paid especial attention to these mixtures not only in buying them but in studying their values for pasture purposes and find they are just what is needed to fill the ever increasing demand for a pasture that will produce pork at a minimum price and at the same time build up the land. We find that in this all the necessary bone and muscle building materials for young pigs are produced. It has long been proven that the cheapest way to produce pork is by means of a good pasture. If you do not have a good Alfalfa or Sweet Clover pasture on your farm, put in a pasture of this mixture by all means. It will make you more money in raising hogs than anything you can do. The larger the farm the more you should sow. When you see young pigs up to their backs in this Clover it surely will bring to your mind all the advantages of a good pasture. They require little or no grain and will make gains faster than any other way that they can be handled. In times like this it is a wonderful money maker. To be able to pasture more hogs, than the same acre has ever done before is the mission that this mixture fulfills. Start using it, increase your pork production, save on your grain crops, build up your farm and make more money.

A Soil Builder

We have found that in growing this mixture all the good effects of the legumes are gotten and many of the individual benefits of each member of the combination are derived. One variety will stand more hardships than the others, another will stand more drouth, another more acid soil and another poorer soil. Some of them reach down to greater depths in

the soil with their roots thus opening it up and making it easier for the others. This makes it possible for this mixture to build up a rundown farm and put it on a paying basis faster than any other crop can do.

A Rich Hay Crop

This combination makes a better hay than can be gotten by any one crop. It gives a variety that is relished by all classes of livestock. The hay, too, is of better quality and we have not heard of a case where cattle would bloat on it.

In this mixture you are offered the best values of the year for a crop that will not only make you money in pasture and hay, but will build up your farm at the same time. We feel there is a place for it on every farm.

Since we must depend upon mixed lots of seeds that have either become mixed in the field or in shipping, we are unable to quote you firm prices, but our monthly price lists will make you special prices on these special lots.

Billion Dollar Grass

There has been such a call for Billion Dollar Grass since the farmers have been giving more attention to better forage, that we are going to tell you more about this forage, often known as Japanese Millet. No doubt the best way to describe this wonderful crop is to quote what leading agricultural authorities have to say about it.

Professor Williams of the United States Department of Agriculture says: "Already widely grown as a hay crop, it deserves more general use for soiling as this Grass is of particular value for feeding to dairy cattle, young stock and sheep. The Billion Dollar Grass (*Panicum Crusgalli*) in many sections of the country can be made a supplement for pasture in such a way as to allow a material increase in the number of stock that can be kept on the farm. On account of the large yield of any good quality of forage, it is most excellent for silo use, as frequently a good crop can be raised under conditions which would not admit the growing of corn for ensilage. The Billion Dollar Grass, if compared with seed and forage, will run ahead of Timothy. The seed contains almost as much fat and extract matter as shelled corn and a little more protein."

Every Class of Live Stock Relishes It

Every class of live stock from horses to poultry relish and make gains on Billion Dollar Grass. Cows will prefer it to corn. When used for silage an ideal balanced ration for milch cows can be had by mixing two parts Billion Dollar Grass and one part Soja Beans when filling the silo. This mixture requires no other grain, oil meal or other feeds as supplements, but will make a feed that will increase milk production.

A Great Hay Crop

Billion Dollar Grass is not only a wonderful crop for the silo, but will produce fine leafy hay anywhere in but six to ten weeks time. If sown the first of May it will be ready to cut the middle of July. The warmth and richness of the soil will determine the height which varies from five to eight feet. It has been known to produce 12,000 pounds of hay per acre at the Massachusetts Experiment Station, and 50,000 pounds of rich green fodder.



Timothy and Alsike Mixed

Timothy and Alsike being both perennials are especially suited to be grown together; both are partial to moist, low lands and ripen at the same time, producing one of the greatest hay and pasture crops known.

Why We Can Sell This Seed So Cheap

In some sections of the country great quantities of Timothy and Alsike are harvested together for seed, and as the seeds of the two are nearly of the same size, shape and weight, it is impossible to separate them in the cleaning and grading process, and because of this fact we are able to buy these seeds when mixed at a much less price than we could buy them separate and mix them. Hence, we are able to offer you Seed of the combination of two of the greatest Pasture and Hay Crop Plants at a price which will save you from one-third to one-half the cost of your seed. The seed as we buy it in the country is in about the right proportion for seeding, and taken all in all, I believe that we are in this mixture offering you the greatest value in grass seed that you will ever be able to secure for the money. We know that it will please you for there are hundreds and hundreds of men throughout this section who would sow nothing else. It certainly does produce a wonderful hay and pasture crop, as the Timothy added to the Alsike forms a thick bottom, greatly increasing the yield and adding to the palatability and feeding value of the crop.

These Crops Especially Adapted for Growing Together

Timothy and Alsike when grown together greatly aid one another, the Alsike being a legume supplies nitrogen to the soil, thereby greatly promoting the growth of the Timothy. The Timothy supports the Alsike, enabling it to make its best and most rapid growth, and acts as a protection to it during the winter, preventing it from winter-killing. Thus, you will find these two plants reaching their maximum production when grown together. Timothy and Alsike mixed is one of the greatest crops for reclaiming wet lands which have been recently drained, and thousands of acres of it are being sown in sections where the construction of drainage canals have made it possible to reclaim land which was formerly nothing but swamp land, which when newly drained is usually sour and quite often contains a greater or less amount of alkali, making it impossible to produce profitable grain crops upon it. Timothy and Alsike seem to thrive particularly well upon this kind of land, and much greater returns can be obtained from growing this crop on this kind of land than any other crop.

Another most important feature to take into consideration in regard to Timothy and Alsike is the fact that they are both perennials, and you do not have to be re-seeding them every year or every two years, but when you sow them obtain a permanent meadow or pasture which will be there until you want to break it up. This fact should not be lost sight of when ordering the seed for your meadow or pasture, for it is not always convenient to have to break up a meadow or pasture every two years, as you have to do when using some of the other Clovers; we do not believe you could do better than to use Timothy and Alsike for seeding any land which you may want to sow. Timothy and Alsike will thrive on any land located anywhere within the clover belt, for although this crop reaches its highest state of perfection on moist, low land, it can be grown anywhere with good results.

Timothy and Alsike the Greatest Feed You Can Grow

Timothy and Alsike hay is becoming recognized as one of the most desirable hays upon the market, for as the teamsters and horsemen in the cities are becoming educated to its high feeding value, it is bringing a premium over every mixed hay. Timothy and Alsike hay is much more easily cured than is the hay of Timothy and Clover, for the stems are smaller and when mixed with the Timothy hay seem to dry out readily and still retain their color and leaves, producing one of the most palatable and nutritious hays which one can find for any and all kinds of stock.

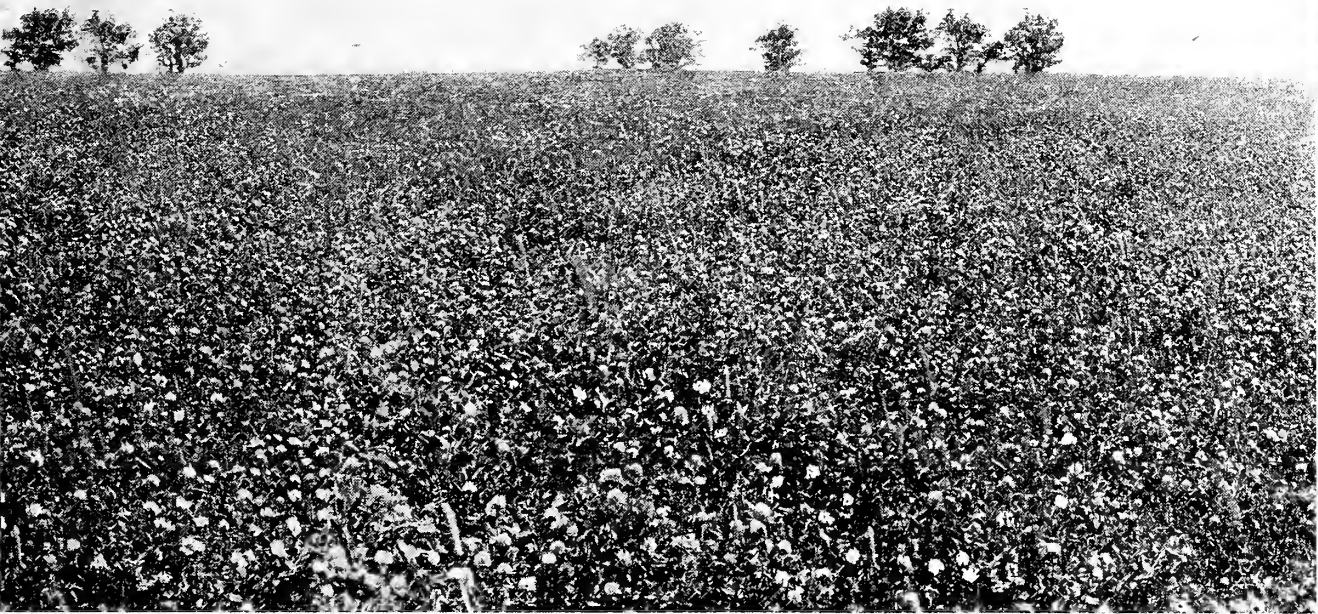
We are very enthusiastic over these two great crops when grown in combination, for we believe in them the wide-awake, progressive farmer will find a crop which will be of material use to him, and one which will not only be the means of his securing a big revenue from land which was formerly waste, but one which will enable him to sow a larger acreage at a smaller cost than it would otherwise be possible for him to do.

Think of it, these two great crops being sown in mixture at almost a Timothy seed price. While, if you purchase them alone you would pay from \$15.00 to \$20.00 a bushel for the Alsike, and be able to buy the Timothy but little cheaper than we can sell you the two mixed.

This mixture is a valuable addition to make your permanent pasture, for reseeded places where the wash has covered up the other grass, or in draws, sloughs, or seepy places.

Try this great pasture and meadow mixture and be convinced of its many good qualities.

Price—See green list for latest quotations.



Timothy, Alsike, and Clover Mixed

In order to meet the demands of our customers for a mixture to sow for pastures and meadows, we have mixed our Timothy and Alsike and our Timothy and Clover, enabling us to offer you these seeds in mixture all ready for sowing. This seed is of the same quality as the Timothy and Clover mixed and the Timothy and Alsike mixed, and these three when sown in combination will furnish you with one of the most desirable meadow and pasture mixtures which you can secure, and at the same time save you an enormous amount of money in your seed purchase, for buying as we do in such large quantities we are enabled to furnish you this seed at a big saving.

Advantages of Sowing Timothy, Alsike, and Clover Mixed

Many advantages are to be gained by the sowing of Timothy, Alsike, and Clover in mixture, first among which may be mentioned the excellent quality of hay produced. The hay resulting from the blending of these three great crops is without question the most palatable and nutritious hay which can be grown. The yield of hay grown by combining these crops exceeds that of any of them when grown alone, as the Clover not only fills the bottom of the swath but it stimulates the growth of the Timothy. A meadow or pasture resulting from the sowing of Timothy, Clover, and Alsike is more permanent than Timothy and Clover alone, as Alsike, like Timothy, is a perennial, and ever after the Clover has outlived its usefulness you still have a meadow or pasture that will endure for years.

When grown on poor land the humus necessary to produce a bumper crop is placed there by the Clover and Alsike thus leaving the land in better shape than before this crop was grown. There is no extra work in mixing this seed after you receive it as it is already mixed uniformly as nature grew it, and ready for the seeder, thus eliminating a lot of work in measuring and mixing. It is cheaper when bought this way.

All of Our Mixtures Backed by Our Absolute Guarantee

Remember, we sell you our mixed Timothy, Clover, and Alsike under the same guarantee as any other seed, and if you are not perfectly satisfied with it after you have tested it in any way you like, send it back to us and we will refund your money and whatever freight you have paid. For if you are not satisfied we are not, and we do not want a single dissatisfied customer.

Timothy and Red Clover Mixed

Timothy and Red Clover make an excellent combination when sown together, and to meet the demands of our customers who wish to secure Timothy and Red Clover already mixed, we have retained quite a quantity of seed as it came from the grower and as the seed was mostly all bought on a Timothy basis, we have some bargains to offer you in Timothy and Clover mixed.

Many Advantages to be Gained by Growing Timothy and Clover Mixed

Timothy and Clover produce a better quality of hay when sown together than either produces when grown alone, and the hay is much easier handled when grown in combination. Clover hay especially is quite hard to cure when grown alone, but when grown in combination with Timothy it dries out more readily and goes into the stack or barn in better condition.

Timothy also acts as a support for Clover during the growing period. When the two are grown together, Timothy and Clover will make a much heavier crop of hay than either grown alone, as the Clover fills the bottom of the swath, leaving no waste room between the plants. The Clover being a legume gathers the nitrogen from the air, storing it in the nodules on its roots, when this most necessary plant food for the production of a Timothy crop becomes available for the Timothy. Thus we have Timothy reaching a higher state of production when grown in combination with Clover than grown alone.

Why pay Two Prices for Timothy and Clover When You Can Secure It Direct from Us

We have no retail merchants to protect. We sell direct to you on a wholesale basis. Get our prices on Timothy and Clover and be convinced of the exceptional values we are offering you. While we have quite a large stock of mixed Timothy and Clover on hand, we expect a big demand for this seed this spring, and when our stock is exhausted we cannot replace it at the present prices.

Timothy and Clover when bought separate command much higher prices, and the tendency is for prices to get higher as the years go by. The reason for this is that there is an ever increasing tendency among farmers to grow these crops in combination, as shown by the great number of orders which we receive for mixed seed, leaving a smaller acreage each year which can be harvested as straight Timothy, or straight Clover. These facts, we believe, fully demonstrate the fact why we can offer you mixed Timothy and Clover so much cheaper than we can Timothy or Clover in straight lots. **Price—See price list.**

Red Top or Herd's Grass

In the Southeastern portion of this State Red Top is grown almost exclusively. In fact, this section of Illinois is the home of this crop and more seed is produced here than anywhere else in the world. For this reason we are always in a position to furnish you the best quality of this seed at the lowest price.

Red Top is especially adapted to growing on a wet soil, having an impervious sub-soil. Because of this characteristic it is especially valuable for growing in undrained fields, as it will flourish on wet soil where no other crop will grow. It is better adapted to the heavy clay soil of Southeastern Illinois and Southwestern Kentucky than any other crop.

Especially Valuable for Pasture and Meadow Mixtures

Red Top is a very valuable grass for growing with Timothy and Clover, as it fills the lower part of the swath and fills the bottom, thereby increasing the tonnage and forming a thick, heavy sod. If you have had trouble in getting a good stand of grass on your pasture or meadow, you should not fail to sow it to Red Top. It's the crop that succeeds when all others fail. Although it is especially adapted to low, wet lands and marshes, it will grow anywhere and can always be depended upon to withstand any hardships. It is a hardy perennial and for New England conditions cannot be surpassed for the meadow or pasture.

Red Top is relished by all live stock, and when properly handled is the most palatable of hay and pasture grasses. The pasture thrives under the very closest grazing. In fact, a Red Top pasture should be kept closely cropped, as the young grass is much more palatable than if allowed to get rank. Red Top hay in order to be of the finest quality, should be cut before it gets too rank, as it is much more palatable than if allowed to ripen.

Easy to Get a Stand of Red Top

It is very easy to get a stand of Red Top, and many follow the practice of sowing this seed where it is not possible to cultivate the land. While this practice is not to be recommended, it illustrates the possibilities of this wonderful crop, and because of its ability to grow when no other crop can be grown, it has been the means of converting many waste places into productive fields. Should you be troubled with gullies, this crop cannot be beaten for stopping the wash, as it forms a thick sod that will catch and hold the soil, and because of this feature has proven a very valuable grass on many farms.

Two grades of this seed are offered for sale. The Red Top in the chaff and the Fancy or hulled seed. We handle only the Fancy or solid seed, so in comparing our prices do not confuse them with the prices of dealers who handle the inferior seed in the chaff.

Red Top sells for a very modest price, and as the seeds are very small an acreage of this crop can be seeded much cheaper than any crop we know of. The fact that Red Top can be grown on any soil and that a large acreage can be seeded so cheaply makes this crop worthy of your consideration if you have had trouble in getting a stand of grass.

Bromus Inermis

This wonderful crop is meeting with universal favor wherever grown. It is one of these crops that can be grown on any soil and under the most adverse conditions. It is especially adapted to the dry, cool sections of the Northwest. It has been the means of converting thousands of acres of barren waste into a land of beauty and profit. It withstands the adverse conditions of climate and rainfall from year to year, and to secure a stand of this luxuriant grass once is to never be without plenty of hay and pasture. This is the crop that never fails, and as you are growing grasses under dry land conditions, you should certainly not be without this wonderful crop.

Bromus High in Feeding Value and a Heavy Yielder

Bromus is very high in feeding value, as it contains a high per cent of protein, ash and fat, the most necessary constituents in animal feeding stuffs. The quality of the hay and pasture is good, and no grass can be grown that is more relished by all kinds of stock.

Bromus is a very heavy producer and produces an abundance of the very finest hay and pasture. It is especially desirable for growing in those sections where Clover and Timothy do not thrive, and it has been the means of producing thousands of tons of valuable feed upon otherwise unprofitable land. This crop is no experiment. It has passed the experimental stage and you can make no mistake in proving it. It is a success from every standpoint. It is recommended by the highest authorities and we feel certain that you will be pleased with the results you secure from this crop. Our seed stock comes from a reliable source, and as we handle this seed in quite large quantities, we are able to make you a much lower price than other dealers.

Price—See price list, and remember bags are free.



Red Top or Herd's Grass.

Orchard Grass

This grass is particularly adapted to those sections lying east of the Missouri and Arkansas Rivers. Wherever it has been given a fair trial it has been placed in the front rank of grasses for permanent pasture. It is a rank, deep rooted perennial and it does not form true sod, as it grows in bunches. It starts very early in the spring and keeps on growing during the hot summer months. It furnishes an enormous amount of green foliage which is very palatable and nutritious. Compared with timothy, it is about 50 per cent richer in protein and ash. It is adapted to a wider range of soils than most any other grass. It grows faster. It resists drought better than timothy or blue grass. It grows well in the shade. This characteristic and the fact that it does not produce a sod have made it very desirable for growing in orchards where cultivation is not practiced.

Price—See price list, and remember bags are free.

We are very large dealers in Orchard Grass seed and because of this fact can always save you money on this seed. Our seed stock is grown by the most reliable growers and you will always find our seed high in germination and purity.

Orchard Grass is becoming more popular each year. It seems to fill a place on the average farm that no other grass will fill. The fact that it comes on so early in the spring and furnishes pasture before any other crop, makes it very desirable.

Orchard Grass is very deep rooted for a grass. The deep rooted habit together with the thick broad leaves is no doubt responsible for its ability to withstand drought.

There is little difficulty encountered in establishing Orchard Grass on any fairly well drained soil. The soil should be plowed deep enough so that the roots can work their way down easily.

The seed of Orchard Grass is very heavy in hull, making it light for its bulk. A good quantity of seed is necessary, usually 25 to 35 pounds per acre. This may be sown either alone or with small grain.

Orchard Grass is grown in combination with clover and grasses to a great extent. It works into such a combination very nicely as it does not form a sod and is able to withstand a large amount of shade. See green list for prices.

Perennial Grasses

KENTUCKY BLUE GRASS. With the prices of land advancing as it is at the present time, we must make our pastures better and better in order to produce the maximum amount of pork, beef and mutton on a given acre. No other grass will prove as valuable for establishing a permanent pasture as Kentucky Blue Grass. It is the king of grasses. It stands head and shoulders above them all when it comes to a permanent pasture. No stock farm can afford to be without a Blue Grass pasture. That is the source of a permanent income. It is not only the most palatable of the pasture grasses, but it is the most nutritious and is richer in protein and ether extract than any other grass. The seed we are offering you is strictly reliable in every respect. It has been carefully handled to maintain its germinating qualities, and we are making you a price below what many are asking for inferior seed stock. Send for samples.

Extra Fancy Kentucky Blue Grass. This grade of seed weighs from 21 to 23 pounds to the measured bushel. It is extra fancy new crop seed, and we guarantee its germination. Price: 5 lbs. or more, 35c per lb. Ask for prices on bushel lots or more.

Fancy Kentucky Blue Grass. This is an extra quality of Blue Grass Seed, and although not quite as bright and heavy as our Extra Fancy grade, it is all first-class, new crop seed, and we guarantee the germination. Price: 5 lbs. or more, 30c per lb. Ask for prices on larger amounts.

ENGLISH BLUE GRASS, or Meadow Fescue. Meadow Fescue is a perennial, attaining the height of from three to four feet, containing fine large leaves. It has been cultivated quite extensively in the Eastern States and is coming into favor in the Northern States and Canada. It is used to an advantage in blending permanent pasture and meadow mixtures, and it grows very rapidly and on wet and moist lands, hence one can keep down other grasses. It will stand lots of close pasturing by stock, and while it does not produce the tonnage per acre that Timothy does for hay, is much more permanent and more palatable to the livestock.

Price—5 lbs. or more, 25c per lb. See price list on bu. lots.

ITALIAN RYE GRASS. This variety of Rye Grass is an annual. It is used quite extensively for seeding in pastures where clover and timothy have died out. It is grown quite extensively on the Pacific Coast and many places in the southern part of the United States. Italian Rye Grass, while an annual, re-seeds itself very rapidly, by allowing the hay to stand until quite ripe before cutting, which injures the quality of the hay very little. Sow about twenty-four pounds of seed per acre.

Price—5 lbs. or more, 18c per lb.; 100 lbs. or more, 16c per lb. Ask for prices on larger amounts.

CANADIAN BLUE GRASS. This variety of Blue Grass closely resembles Kentucky Blue Grass in appearance. It grows much taller, however, and is more inclined to grow in tufts or bunches than to form a universal sod. It should be sown at the rate of about 30 lbs. to the acre.

Price—5 lbs. or more, 18c per lb. See list for prices on bushel lots.

ENGLISH RYE GRASS. This grass was the first grass grown under domestication. Its seed was the first to be placed upon the market as a seed of distinct variety. This grass is a very important crop in Europe and forms the base of the pasture mixture of some of the finest meadows in the land. It seems to be especially adapted to pasturing and will stand a great amount of close cropping and trampling. It will grow upon any soil in the Corn Belt, and for use in the permanent pasture mixture should be found very valuable. Sow about twenty-four pounds of seed per acre.

Price—5 lbs. or more, 20c per lb. Ask for prices on larger amounts.

TALL MEADOW OAT GRASS. This grass is particularly adapted to warm, dry climates, where Timothy will not grow. It is quite productive, stands pasturing well and remains green until quite late. It forms a very valuable mixture with Orchard Grass and Red Clover. It may be sown in the spring at the rate of two to two and a half bushels per acre, or when sown with Orchard Grass and Red Clover blended proportionately.

Price—Postpaid, 1 lb., 35c. Your expense, freight or express, 3 lbs., 65c. See price list on bushel lots.



A Mixture of Perennial Grasses Makes a Wonderful Crop.

BERMUDA GRASS. This is the greatest pasture grass of the South. It is a low growing, fine leaved perennial grass, with vigorous, creeping stems. It is never injured by the closest pasturing or frequent cuttings, and forms the foundation of all perennial pastures of the South. It is very high in feeding value and very palatable to all kinds of stock. It is distinctly a sub-tropical crop and flourishes under the hot rays of the southern sun.

Price—75c per lb., postpaid. Your expense, 5 lbs. or more, 50c per lb.

GROWING THE CROP

SOIL—Most of the perennial grasses prefer a rich limestone soil and a rather moist cool climate.

SEEDING AND TILLAGE—Several methods are practiced in starting the perennial grasses. They may be sown with Clover and Timothy where these crops succeed well or sown in late summer or early fall in the corn field or on a light snow in the winter when the ground is slightly frozen and honey-combed with cracks. Most of these crops should be sown at the rate of about 14 lbs. of seed per acre but the amount of seed sown depends a great deal upon the conditions under which it is sown.

HARVESTING—All grasses of the Blue Grass family are primarily pasture crops and are very seldom harvested for hay. While the hay is very nutritious it is not usually palatable and is very hard to cure. The other perennial grasses are often harvested for hay and are handled much in the same way as other hay crops, but we think that by far the larger percentage of these are grown for pasture as their hardy nature enables them to withstand close grazing and makes them especially suitable for this purpose. Much of the seed is often adulterated and you should always secure your seed from reliable sources to insure its purity.



Permanent Pasture and Meadow Mixtures

Our American Blend

To meet the demands for grass seed which will produce a meadow or pasture that will furnish the greatest amount of forage and at the same time produce a crop that will make a continuous growth throughout the season and meet various conditions of soil, climate, etc., we are offering you our special pasture mixtures which will fulfill these requirements. Some grasses are particularly adapted to wet low grounds, where there is plenty of moisture, others to dry, cool climate of high altitude, and still others flourish in the dry, oppressive heat of the far South. To meet requirements for pasture and meadow mixtures, adapted to different conditions, we are offering you our American Blend Mixtures, which are the result of many years experience in handling pastures and meadows which have proven conclusively that a mixture of grass makes a better meadow and produces a better permanent pasture than the growing of one crop exclusively.

Composition of Our American Blend Mixtures

Nothing but first-class seed is used in the making of our American Blend Mixtures, all of which has been carefully re-cleaned and is of a high grade which should give the best returns. These mixtures are made from the following list of seeds of well known varieties: Alfalfa, Blue Grass, Timothy, Red and Mammoth Clover, Alsike, Red Top, Orchard Grass, Meadow Fescue, Tall Meadow Grass, English Rye Grass, Italian Rye Grass, Bromus Inermis, and Creeping Bent Grass. Our recommendations for quantity to seed per acre in the following combination is fixed on the basis of a good fair seeding, and can be varied to suit the needs of each particular individual.

Our American Blend Mixtures for Permanent Meadows

This mixture has been formulated with the idea in view of producing the greatest tonnage of palatable, nutritious, high grade hay upon a particular kind of soil and under certain climatic conditions. Those grasses have been selected which will produce the most vigorous growth in the shortest time and produce hay of superior quality. Grasses are selected which will ripen at the same time so that a uniform cutting can be secured.

By producing a blend which will meet these different requirements, we believe we are offering you one of the greatest crops which can be grown, for we do not believe that any one crop will produce the well-balanced results year after year, as will our Permanent Meadow Mixture, for the longer it stands the better it gets, and it will come through extremes of weather conditions which would prove disastrous to most crops that are grown alone.

No farm can afford to be without the permanent meadow. It is the advance guard of intensive farming and as our farms increase in value, we must grow these crops which will give us the maximum production.

	100 lbs.	50 lbs.	25 lbs.	5 lbs.
	per lb.	per lb.	per lb.	per lb.
1. For moist ground, rich soil.....	\$0.15	\$0.15½	\$0.16	\$0.18
2. For dry, high ground, strong soil.....	.15	.15½	.16	.18
3. For dry, high ground, light soil.....	.15	.15½	.16	.18
4. For marshes, swamps, overflow land.....	.15	.15½	.16	.18

Our American Blend Mixtures for Permanent Pastures

This pasture mixture has been blended with not only the idea in view of furnishing those grasses adapted particularly to soils and climate, but it has also been blended with the idea in view of producing a pasture which would improve in quality as the years go by and furnish the greatest

amount of feed over the greatest length of time. These grasses will furnish pasture throughout the entire grazing season, and owing to the deep rooting and spreading character of many of the varieties used in blending this mixture, fields will always look fresh and green.

We recommend the sowing of twenty-five pounds per acre.

	100 lbs.	50 lbs.	25 lbs.	5 lbs.
	per lb.	per lb.	per lb.	per lb.
1. For moist ground, rich soil.....	\$0.15	\$0.15½	\$0.16	\$0.18
2. For dry, high ground, strong soil.....	.15	.15½	.16	.18
3. For dry, high ground, light soil.....	.15	.15½	.16	.18
4. For marshes, swamps, overflow land.....	.15	.15½	.16	.18

Lawn Grass Mixture

"The home is the greatest of all institutions." Then keep it beautiful. Nothing gives bigger returns for the money than a beautiful, velvety, well kept lawn, for there is nothing that will add to the satisfaction of the dwellers as much as will a beautiful lawn.

Sowing seed is a much more satisfactory way to secure a nice lawn than by the use of turf (sod). If you are careful to secure from a firm of reputable seeds of low-growing, tenacious sorts, it will save you much trouble in the end.

We offer you in our American Lawn Grass Mixture the finest evergreen grasses, mixed in such proportions that they will produce a healthy, compact beautiful sod in a very short time. Price, postpaid: 1 lb., 50c; 2 lbs., 90c; 5 lbs., \$2.00.

American Southern Mixture

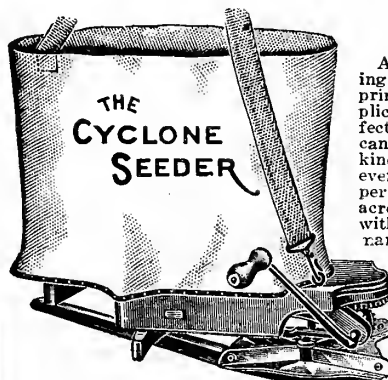
Made up of grasses especially adapted to a Southern climate, and so blended that they will produce a beautiful green lawn throughout the entire season. Price, postpaid: 1 lb., 50c; 2 lbs., 90c; 5 lbs., \$2.00.

American Terrace Mixture

Specially adapted to keep the terrace and sloping places looking nice. The grasses in this mixture are of such a nature that they will prevent washing and hold the soil. Price, postpaid: 1 lb., 50c; 2 lbs., 90c; 5 lbs., \$2.00.

American Shady Lawn Mixture

This mixture has been blended with the idea at all times in view of producing a lawn in those places shaded by trees or buildings to such an extent that other grasses would not grow. We have therefore made up this mixture from those grasses that grow naturally in the woods. Price, postpaid: 1 lb., 50c; 2 lbs., 90c; 5 lbs., \$2.00.



Cyclone Seeder

A great labor and seed saving invention. The working principles are a marvel of simplicity in construction and perfect in operation; even a boy can work it. It will sow all kinds of small grain or seeds evenly and any desired amount per acre, and from 30 to 60 acres per day. Instructions with every machine. The manufacturer has had 25 years' experience in making sowers, and has a very high reputation for skill. We make our prices so low in order to give every farmer who reads our catalogue an opportunity to procure one of these most valuable seeders.

This seeder is guaranteed to do satisfactory work and you will be pleased with it.

PRICE—Parcels Post, prepaid, \$2.75.

Northern Grown Seed Oats

Change Your Seed

Unless you change your seed oats at least every other year you cannot expect a bumper crop. No other grain crop will pay the dividends on the money invested for good seed that the Oat crop will. All experts on this great crop agree that it is an **absolute necessity** to import Northern Grown Seed Oats in the great Corn Belt, and place Northern Grown Seed above all other requirements in the production of a successful Oat crop.

Why Our Seed Oats Are the Best

We are Field Seed Specialists and put forth every effort in securing seed of varieties which from actual field tests show their superiority over others. We have made a specialty of Seed Oats for years and have had them grown in Canada and the Northwestern States where the seed produced is superior to that in any other part of the world. In no other country does the Oat plant reach such a state of perfection as it does in the Northwest where our seed is grown and it has been shown by actual field test to produce seed superior to any other territory, not only for quality and yielding ability but for the ability to resist adverse weather conditions as well.

Improve This Golden Opportunity

Leave no stone unturned to get your share of this great harvest. Don't for the sake of a few paltry dollars sow seed of poor quality when you can buy seed that will produce from 20 to 40 bushels more per acre than you have been growing if you have not been sowing Northern Grown Seed. No crop deteriorates so quickly as Seed Oats and the small cost of seed is a trivial matter compared to the results obtained, and with the high prices that are sure to prevail you cannot afford to not put forth every effort to secure good seed.

Our Seed Has Been Carefully Recleaned

Our cleaning machinery is of the most improved type, and not only removes all of the dirt and weed seed, but all of the light and inferior kernels as well, so that instead of having seed oats which germinates from 50 to 60 per cent you receive oats which will germinate nearly 100 per cent, and each kernel plump and strong, insuring you a stand of healthy vigorous oats, that will make you 100 per cent on what you invested in seed.

We make a specialty of the Green Mountain favorite, Re-Generated Swedish Select, the New Alberta, Northwestern Grown Swedish Select, Kherson, Improved Silver Mine, Sixty Day Oat, Iowa 103 and Iowa 105. These varieties have all shown by actual field tests to be the leaders, and although we have at present a couple of new varieties under consideration which have for two years shown some very phenomenal tests, yet they have not proven by actual field tests that they will meet the exacting requirements which we demand of our Seed Oats before offering them to you.

The Oat Crop Ranks Third in Value of Cereals

The original home of the Oat was thought to be in Central and Western Europe and Eastern Asia. Oats being adapted to the cold, moist climates of the North, became the favorite food of the hardiest people in Northern Europe, and today forms the daily breakfast food of millions in the United States. The regions of the greatest oat production are Canada, Norway, Sweden and Northern Prussia.

The oat grain as a whole is found to contain a larger amount of crude fibre and ash than any other cereal, and it is of very high value as horse feed as it has certain stimulating qualities which make it very valuable for driving horses. It is a very valuable feed for young and growing stock, as it contains lots of bone and muscle building elements. The straw from the oat plant leads that of all other cereals in feeding value, and the oat plant if cut at the proper time produces a very nutritious hay.





New Alberta—Note the Large Sized Kernels, Thin Hull, All Meat.

The Heavy Yielding Varieties Adapted to Eastern Conditions

We conscientiously believe that we are offering the Eastern farmer in the Green Mountain Favorite and the New Alberta, the best varieties of Seed Oats that can be grown. The large stiff straw that supports the heavily laden heads of these varieties enables them to withstand adverse climatic conditions that no other varieties will withstand.

These are the vigorous growing Oats of the oat family. They are the varieties that will succeed where no other oats will grow. Our Seed stock of these varieties has been especially grown for us by the leading growers in the business and we cannot recommend it too highly to you. We feel that if you start growing these oats that it will mean the doubling of your oat crop. This is the year of all years to use the very best of seed that you can secure. Oats are sure to be high another year and you should certainly put forth every effort to produce every bushel possible upon each acre.

The American farmer is today practically supplying the world markets with foodstuffs and as this crop is the principal foodstuff not only for live stock but for the human race as well, there is sure to be a world wide demand the coming year for this great cereal. The seed stock we are offering you of these high yielding varieties, we believe, is the best lot of seed oats that ever came out of the Northwest, and we feel sure that they will be the means of greatly increasing your yield. This seed will make you money on your new oat crop.

Green Mountain Favorite Oats

This oat has become a universal favorite among some of the largest growers in the Central States. It has made some phenomenal yields here in the corn belt, and we feel that you will be greatly pleased with the high quality which we are offering you in this variety. We have grown this oat very successfully upon our own farm. Therefore we are in a position to know just what this wonderful variety will do for our customers, and when we tell you that we believe we have in this variety an oat which will completely revolutionize the small grain growing industry of the Eastern States we are not basing our opinion upon the results obtained by other growers, but upon our own success.

Making Money Introducing This Variety in Your Locality

We know of no other way by which a progressive, up-to-date farmer can make more clear money than by introducing these oats into his neighborhood. Your neighbors will come for miles to secure the seed of this variety when they once see them growing. We know of one farmer in Southern Iowa who sowed thirty acres of the Green Mountain Favorite in a field along the main traveled road which went by his farm. Before these oats headed out they were the topic of conversation of everyone who passed by the field, and because of their strong, vigorous growth and dark, healthy color, there were diverse opinions expressed as to just what this crop might be. Well, when the crop commenced to head out there were sure some sensational comments made as to how much they would yield per acre. We had the pleasure of visiting this field when they were about half through harvesting this crop and we think we can safely say that the afternoon we were there, there were thirty-five or forty men who came into the field to admire this enormous crop. When the crop was threshed the tally box on the thresher registered twenty-eight hundred bushels, or a little better than ninety-three bushels per acre, and when pulled over the scales they weighed out fifteen bushels more per hundred, making a yield by weight of one hundred and eight bushels per acre. The following spring these oats were sold for seed to neighbors in that locality for \$1.00 per bu.

Green Mountain Favorite Superior to Other Varieties

The Green Mountain Favorite is a very vigorous grower, making it smut, blight and rust resistant. The grains are large and pure white in color, with a very thin hull, commanding the highest market price, as they are well suited to the manufacture of oat meal and are of high food value. The heads are long, bushy, and always heavily loaded with grain, giving a field at harvest time the appearance of being a solid mass of grain. The straw is very stiff and of fine texture, and it will stand up extremely well in all kinds of soil, and it will not wrinkle over like other varieties if allowed to stand a few days after ripening. This variety is a very persistent stooler and it is not necessary to use as much seed per acre as in the case of other varieties. The young plants are very hardy, enabling one to sow their oats quite early in the spring. The plants make a very uniform growth and the grain ripens very uniformly, and this characteristic, together with its ability to withstand adverse weather conditions at harvesting time, makes the Green Mountain Favorite a very desirable variety from a harvesting standpoint.

Our seed stock has been developed under our direct supervision, and tests from 42 to 45 lbs. to the measured bushel. Our seed is free from smut, and we believe that we are offering you in the seed of this variety the highest quality of seed oats ever placed before the American farmer.

PRICE—See green list for prices.

New Alberta

This new variety of Oats has proven to be a real wonder, for it seems especially adapted to all kinds of soil and climate in the grain growing belt of the United States. This variety is being almost universally adopted by all of the leading Oat growers in Canada and all of the Northwestern States, as it is a very heavy yielder, not liable to lodge or rust and the large plump kernels weighing from 45 to 50 pounds per bushel demands the highest price upon the markets of the Northwest. Our seed stock of this variety of seed Oats has been carefully tested and found to be a wonderful producer; it has been grown in all sections of the country, and has been found to be extremely well adapted to the corn belt.

Start a Seed Plot

At least secure enough seed of this most wonderful variety to sow a seed plot this year, for no corn belt farmer can afford not to grow some of these most wonderful oats upon his farm. Some may think us over enthusiastic in regard to this most excellent variety, but we wish to say to you that we have seen some fields of these Oats which have proven to us that we cannot make any statement too strong regarding the big yields and fine qualities of this variety, and we conscientiously believe that when we are urging you to at least secure enough seed to produce seed stock for your entire farm another year that we are doing you a favor. We know these Oats, we know what they have done for other farmers, and we know what they will do for you, and we do not feel we can make any statement too strong in regard to them.

Reasons Why You Should Sow the New Alberta Oats

1. They are especially adapted to corn belt conditions.
2. They will make you double the money you have been making from other varieties.
3. You will be able to sell them for seed to your neighbors for double the amount which common Oats will bring upon the market.
4. They are the earliest large variety grown.
5. They have a strong stiff straw and will stand up on any kind of land.
6. You can secure more seed value from one bushel of the large plump kernels than from any other variety.

The Most Practical Oat to Grow

This variety is particularly well adapted to withstanding a lot of wet weather at harvest time, as the straw is of such texture that it will withstand much punishment before it will go down. Because of this most excellent characteristic this variety of Oats is rapidly gaining in popularity.

Get some of our heavy yielding pure bred seed and grow the seed stock for your farmer friends. There is no way by which a wide-awake, energetic farmer can be of more use to the community than by introducing a variety of seed Oats which will double the yield of his neighbors' crops, and there is no way by which this same farmer can make as much clear money in so short a time as by putting in these crops and selling them out to the neighbors for seed.

Remember, we handle only the best and purest grades of seed that are grown, and ship all of our seed Oats subject to your approval. If they are not just as we represent them, ship them back and we will return your money and we pay freight both ways.



Regenerated Swedish Select Oats

The Regenerated Swedish Select is perhaps the largest white Oat that was ever introduced into the United States. It was introduced into North America by Garton Brothers of England, and is a decided improvement over the old Swedish Select. It has apparently retained all of the good qualities of the parent stock without any defects of the old. It has a very stiff straw with large sprangled heads with thin-skinned kernels and is the heaviest yielder known to America today.

All our Regenerated Swedish Select seed Oats are grown in Canada and the Northwestern States, and we do not hesitate to recommend them to you in the highest terms, for we feel satisfied they will meet your most exacting requirements in every way; and although you will find seed quoted at a very much higher price, you will not find anything superior in quality.

Be Sure You Secure Pure Genuine Regenerated Swedish Select Seed Oats

Do not confuse our Pure Regenerated Swedish Select Seed Oats with the common Swedish Select and many others that are being represented as the pure stuff or just as good. Remember that the market is filled with substitutes because of the enormous demand of this most excellent variety; so do not be fooled into buying any of these substitutes when you can send direct to use and secure the Genuine Regenerated Pure Swedish Select seed stock, which has been carefully bred up for its heavy yielding quality, its earliness, stiffness of straw, vigorous growth, white berry, thin hull, and drought-resisting qualities.

Why Our Regenerated Swedish Select Seed Oats Will Make You Money

The seed stock of our Regenerated Swedish Select Oats has all been subjected to a high power blast cleaner and you will find every kernel contains a strong, vigorous germ which will, when placed in the soil, push forth a plant with the punch behind it to make a rapid growth, enabling the crop to quickly shade the ground and smoothen out the weeds, guaranteeing you a big yield at harvest time.

Now, which is the cheapest, Oats that cost 50 cents or 60 cents per bushel and produce 75 per cent of a stand of weak, spindly plants, or seed oats germinating about 100 per cent, and pushing forth strong, vigorous plants capable of producing a big crop? Don't you think it will pay you to secure some of this strong seed stock?

One Farmers' Organization Sows Nothing But Canadian Seed Stock

In one locality we have furnished the farmers with Canadian grown Swedish Select seed stock for several years and this year they have informed us that they will have to have several cars. Last year one of these farmers made us feel very much pleased indeed when he told us that although his Swedish Select Oats had been ripe for about three weeks they were still standing and he had hopes of saving many of them. This fact I felt demonstrated all we had ever claimed for this wonderful variety.

Our Seed Stock This Year the Best We Have Ever Grown

Our seed stock this year we believe to be the best we have ever placed upon the market, and when we consider the fact that we have placed thousands of bushels of this seed among the farmers of the Middle West, you can appreciate just what this statement means. All our stock has been carefully re-cleaned and graded, and you will secure seed stock which will give you nearly 100 per cent germination. Write us for samples and be convinced of the really high class quality of seed Oats which we are offering you.

PRICE—See green list for prices.

Northwestern Grown Swedish Select Seed Oats

This is today one of the most popular varieties and very widely grown in the Central States. This variety usually commands a premium on the market because of its clear white color, which makes it so desirable for the manufacture of rolled oats. This Oat has made quite a reputation as a heavy and reliable yielder and many farmers who have grown this variety for years would grow no other. It is beyond a doubt the best Oats for many localities, and we feel sure that you could make no mistake in sowing this variety, for the straw is strong and stiff enough to stand up well and not lodge readily, and the large sprangle top heads well filled with large, soft hulled kernels make it a very profitable crop to grow. The grain is much relished by horses.

PRICE—See green list for prices.

To meet the demands of our customers who do not feel that they can afford to purchase the Regenerated Swedish Select Seed Oats for their entire acreage, we are offering seed of this most excellent variety which has been grown in the Northwestern States. These Oats are of the finest quality and the price is within the reach of everyone. While we do not claim that they will produce the quality or yield that our Regenerated Swedish Select will, they have given such universal satisfaction that we do not hesitate to recommend them to you in the highest terms.

The Swedish Select has set the pace; others have followed. They are the most popular variety. They are especially adapted for upland the most popular variety. They are especially well adapted for upland other variety tried.

This variety has a stiff straw that holds up the well filled heads and prevents lodging. Another favorable characteristic is its great root development which enables it to resist drought. In sections of the north-west when drought is common this variety is the favorite. Order your seed now and make sure of having them for early sowing. There is often a shortage when they are most needed. If you are going to put in a large acreage of oats this spring, we know of no other hardy variety of northern grown seed oats than can be put in for the same money. For the farmer who has been losing his oat crop, there is a chance in the Swedish Select for him to change to a northern grown oat at little cost.

PRICE—See green list for prices.

Improved Silver Mine

This is today one of the most popular varieties and very widely grown in the Central States. This variety usually commands a premium on the market because of its clear white color, which makes it so desirable for the manufacture of rolled oats. This Oat has made quite a reputation as a heavy and reliable yielder and many farmers who have grown this variety for years would grow no other. It is beyond a doubt the best Oats for many localities, and we feel sure that you could make no mistake in sowing this variety, for the straw is strong and stiff enough to stand up well and not lodge readily, and the large sprangle top heads well filled with large, soft hulled kernels make it a very profitable crop to grow. The grain is much relished by horses.

PRICE—See green list for prices.

SPECIAL PRICES ON CLUB OFFERS

Farmers, get together and buy your seed oats in car lots. You can save more than enough to pay the freight. There isn't a community in the Corn Belt but what would be greatly benefited by changing their seed oats. Get a car of our Pure Northern Grown Seed Oats and double the yield of your community. Increase the oat crop for yourself and neighbors and save money. Write us for samples and prices on a car of Pure Northern Grown Seed Oats. Think it over and act.



The Kherson is the Favorite Early Oat and Never Disappoints.

Iowa 103

The New Sensational Early Oat:

This variety of early oats has probably caused more of a sensation among cereal feeders than any other oat. It was bred up by Prof. L. C. Burnett of the Iowa Station and is undoubtedly the highest yielding strain of early oats ever introduced.

This Variety Especially Adapted to the Middle West

These oats have a very short straw and while they do not reach sufficient height on thin hillsides they are especially suitable for growing on the heavy land of the Mississippi Valley. The heads are unusually heavy and a crop of this variety gives one the impression of being a solid mass of grain. These oats lodge to a certain extent but we do not believe there is any other variety that will outyield them in this section. Another feature about them that is to be recommended is that they are very early and because of their early maturing qualities they are mature before the hot dry weather that is so detrimental to the oat crop in this section.

Secure Some of this Seed

You should not fail to secure some of these wonderful high yielding oats. These are the oats that will make you money on your corn belt farm. They will double your yield. We do not believe there is any way that a wide awake energetic farmer can be of more service to the community than by introducing this variety of seed oats. There is no way that this same farmer can make as much clear money in so short a time as by putting in a field of these oats and selling them out to his neighbors for seed. We have an excellent lot of these oats. They have all been carefully re-cleaned and tested for germination and we feel sure that they will please you in every way.

Price—See green list for lowest prices.

Sixty Day Selected

The Sixty Day Oats, on account of its extreme earliness, has proven to be one of the most popular varieties ever introduced into the southern half of the corn belt. Because of the extreme earliness of this Oat it is enabled to make a crop in those sections where later varieties would be a failure, for it succeeds in making its growth and ripening before the extreme hot weather and hot winds, which often prove so disastrous to some of the later varieties. The Sixty Day is certainly a very valuable variety. It is giving satisfactory results over a wide range of territory. It is at least a week ahead of any other variety. The straw being short and not subject to lodging makes it one of the best varieties known to use as a nurse crop.

The small, yellow kernels are very rich in feeding value, and the straw is the most palatable of Oat straws. Another advantage in growing Sixty Day Oats is that you are often able to get your crop on the market ten days or so earlier than you otherwise would and often secure the advantage of the market. Our seed is Northern grown and we feel that it will please you in every way. Try these wonderful Oats and increase your yield.

Price—See green list for lowest prices.

Early Champion

This is an old well established variety. It is one of the very earliest oats known and can always be relied upon to give a fair yield of grain. These oats grow a short, very stiff straw, always stand up well and ripen very early. Because of these characteristics they have gained much fame as a nurse crop for the grasses as they do not smother the young grass by lodging.

Another feature that is much in their favor as a nurse crop is the fact that they can be harvested very early. In fact, this variety has sometimes been called a Fourth of July oats because they are always ready for harvesting at that time. This variety has gained much fame throughout the corn belt on account of their being such consistent yielders, as while they are not as heavy a yielding variety as some, they can always be depended upon to make a very fair crop and if you contemplate sowing any grass seed with your oats we cannot recommend this variety too highly to you.

Price—See green list enclosed.

Iowa 105

This variety is another one of the master achievements of that famous plant breeder and farm crop expert, Prof. L. C. Burnett of the Iowa Experimental Station. This variety is without a doubt the heaviest yielding variety of early Oats known.

The Iowa 105 like the Iowa 103, as the name implies, was bred up at the Iowa Experimental Station and is especially adapted to corn belt conditions. The great advantage that this variety has over later varieties is the fact that they usually escape the hot weather at the time of filling and produce a heavier yield than if they matured later. The grain of this variety is white and plump. It has a thin hull and is certainly an excellent variety to grow under average corn belt conditions.

We have never had a single complaint on this variety and our customers are growing thousands of acres of these Oats. If you are not growing them you should certainly start this year as they will make you more money than any early Oat that you could grow.

PRICE—See green list enclosed.

Kherson Oats

The Great Little Oat of the Corn Belt.

The Kherson is a small yellow Oat, with a very thin hull, being practically all meat, and has short, stiff straw, which is very high in feeding value. This Oat since its introduction a few years ago has proven a big asset to the farmers of the corn belt, for its early maturing qualities have placed it in the shock before the hot, dry weather could damage it.

The Oats are very heavy and will surprise anyone by their enormous yields, and we feel sure that this variety will add from 20 to 40 bushels of Oats to your yield this year.

The Iowa Agricultural College has in a five-year test placed this Oat above all other varieties of the well known sorts from a yield-per-acre standpoint, and because of their short, stiff straw they are much less likely to lodge, and we have never known a failure where this variety was sown.

PRICE—See green list for lowest prices.

GROWING THE CROP

SOIL—Oats have the ability to adapt themselves to poor soil better than most of the other cereals, but they are very particular about moisture requirements, and should be placed on relatively moist soils.

PREPARATION OF SEED BED—Oats grow quite well on comparatively compact soils, and it is not necessary to prepare the seed bed as deep as for some of the other cereals.

SEED AND SEEDING—Too much emphasis cannot be placed on the importance of securing good seed stock. The Ontario Agricultural College in the seven years' experiment shows that larger seed produced 15 per cent larger yields than medium size seed, and 31 per cent larger yields than small seed. Many other stations have agreed that to secure good heavy seed is of the most importance. Oats should be sown to a uniform depth of not to exceed one inch, and closely allied with uniformity of depth and distribution is the thickness of seeding, and through the numerous experiments that have been carried on to determine what rate of seeding was the most profitable, it has been shown that on an average from three to four bushels of the larger varieties of Oats produce the heaviest and most profitable yields. Oats may be sown broadcast, or with a drill, with about equally good results, some advantage being claimed for the drill in a more even covering of the seed, thus insuring a higher percentage of germination. All seed oats should be treated for smut, for no other enemy of the oat plant has caused such enormous losses as has smut.

HARVESTING—Oats are usually harvested while in the hard dough stage, as when cut at that time they do not shatter as badly as when cut later, and if cut earlier than this the shrinkage of the grain is so great as to cause serious loss. The quality of the straw is improved by being harvested before the grain is in the hard dough stage, but the shrinkage in the quantity of grain more than offsets any advantage to be gained. The Oats may be either threshed from the shock or stacked, and allowed to go through the sweating process, which materially improves the quality of the grain.



Our Improved Seed Stock Will Greatly Increase Your Yields.

Barley

Barley Ranks fourth in the list of important cereals in the United States. As the acreage is increasing each year it shows that it is gaining in popularity, and the farmers are becoming convinced of its high yielding and feeding qualities.

Barley has proven to be a much more profitable crop throughout the Middle West than has either Oats or Spring Wheat and our Improved Barley, is going to be the means of making it possible to produce greater yields of high quality food stuff per acre than can be grown by sowing other cereals. Barley by its chemical analysis, shows that it is equal bushel for bushel in feeding value to corn, and as it commands a higher price and produces more bushels per acre it makes a more desirable crop.

The following will illustrate the value of careful methods in seed selection; and I think will convince you of the importance of sowing nothing but seed which has been carefully re-cleaned and graded. The Ontario Station in an average of six years' experiments obtained 20 per cent larger yields when nothing but plump seed was used than when the crop was grown from inferior seed. Think of it, 20 per cent, one-fifth more grain grown from using plump seed than an inferior grade. The yield is invariably heavy when a good quality of seed is sown. We wish to impress upon you the absolute necessity of securing good seed to grow a successful crop of Barley.

Barley is more certain to produce a crop than any of the other cereals, for it will stand up better, does not lodge readily and will stand more hot, dry weather or wet, foggy days than will any of the other grain crops; in fact, it is more certain to produce a crop under any conditions than any grain which you can grow.

Varieties

SUCCESS BEARDLESS BARLEY

This is a very early variety, with a short straw, and is very much in demand as a nurse crop. This variety of Barley is not so heavy a yielder as some of the more improved varieties, but because of its excellent nurse crop qualifications it is still very much in demand. Our seed has all been thoroughly re-cleaned and graded, and we are in a position to furnish you an excellent quality of Success Beardless Barley, if you desire to sow it, for our seed stock has all come from a reliable source, and is first-class.

PRICE—See our green list for latest quotations.

CHAMPION BEARDLESS BARLEY

This Barley resembles the Success, but it matures earlier and is a very much heavier yielder. The straw is stiff, which insures it standing up well even under adverse conditions. It grows very rapidly and time of ripening can be governed to a great extent by the time of seeding. Some have reported sowing it at a time Spring Wheat was sown and harvesting the crop the latter part of June. Under such conditions as this, Champion Beardless Barley makes a wonderful crop to raise as the great quantity of the very best of feed can be obtained at a time when the prices are highest.

We have a fine lot of seed of this superior high yielding variety, and as it has been carefully graded and re-cleaned we can most heartily recommend it to you. Make up your mind to grow some of this great crop this year, send to us for samples and secure our extraordinary prices.

PRICE—See our green list for latest quotations.

THE GREAT WHITE HULLESS

The extraordinary feeding qualities of this great Barley cannot be fully appreciated only by those stock raisers who have given it a trial on their own farms. There is no Barley that has ever been produced that will add quicker, more economical gains on animals than will this great variety of feeding Barley. This Barley, because of its high feeding value should be fed much lighter than other varieties of Barley, for because of the absence of the hull, which is removed in threshing, it most generally weighs better than 60 pounds to the bushel, and is all feed. Many of the most experienced feeders follow the practice of mixing this Barley with Oats and grinding the two together. In fact this process is followed almost exclusively throughout the Northwest where this Barley is used for feeding purposes by the very best stockmen throughout that section.

Our seed has been especially grown for us by the very best growers in the business, has been especially bred up for its high yielding quali-



ties and feeding qualifications. If you want a barley which will be one of the most valuable additions to your feeding ration and one with a stiff straw that will stand up straight and not lodge, do not fail to sow some of this great White Hulless.

PRICE—See our green list for latest quotations.

ODERBRUCKER BARLEY

This variety of Barley was developed by Professor Moore, of the Wisconsin Experimental Station. It was carefully bred up on the Wisconsin Station Farm for ten years, and Professor Moore regards it as the most satisfactory Barley, all kinds considered, that was ever produced on the station farm. It has a very stiff straw and is quite drought resistant, showing a superiority in this respect over any other variety tested on the station farm. It is claimed this Barley contains nearly double the amount of protein found in any other variety of Barley. Because of its high protein contents it is considered one of the best varieties for both feeding and malting purposes. Our seed has been carefully grown and selected from good seed stock, and carefully re-cleaned and graded.

PRICE—See our green list for latest quotations.

MANSHURY'S BARLEY

This variety of Barley was introduced from Manshury, China. It is a six rowed variety. This is the Old Reliable variety. It has been the National standby for many years, and still heads the list in productiveness according to some of the best agricultural authorities on Barley growing in the United States. Manshury Barley is better adapted for feeding purposes than for malting. This variety of Barley is probably more extensively grown than any other variety, and has a great number of phenomenal yields to its credit. The strain of Manshury which we are offering is an improved strain, has a plumper berry and will yield from 10 to 15 bushels more per acre than the old variety. Our seed stock is plump, heavy and bright; it has been carefully re-cleaned and graded, and we feel confident that it will please you.

PRICE—See green list for prices.

GROWING THE CROP

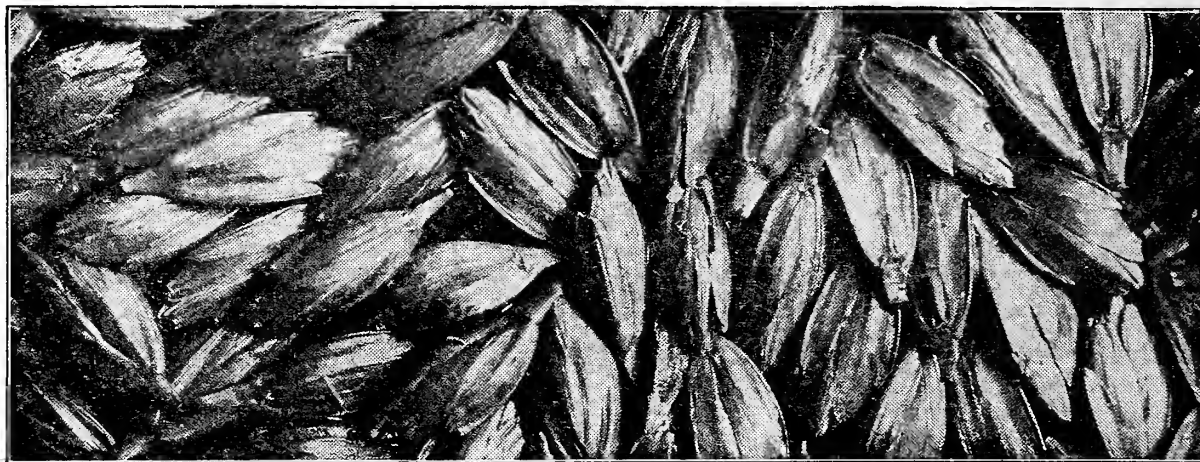
SOIL—Barley prefers a well drained and light, rich soil.

PREPARATION OF THE SEED BED—Barley should be grown under as uniform conditions as possible, therefore good clean ground, well disked and pulverized in the spring furnishes a desirable seed bed.

SEEDING—Barley is usually seeded shortly after the Oats are put in, but as Barley will flourish in warm, dry weather a delay in seeding is not as detrimental as in the case of Oats or Spring Wheat, and Barley fits very nicely into the cropping system because of this characteristic, for oftentimes there are seasons when you can not sow Oats because it is too late before the ground can be put in shape; but in the case of Barley which does not need to be seeded so early the ground can be prepared. Wide variations in the rate of seeding seem to give as equally good results, but two bushels is the amount ordinarily sown, as there are somewhat less number of seeds in a bushel of Barley than in a bushel of Wheat or Oats, and as thin seeding is conducive to irregular ripening and as Barley stools less than Oats, we would not advocate sowing any less than two bushels per acre, and would prefer two and one-half under average corn belt conditions.

HARVESTING—Barley is usually harvested somewhat earlier than either Wheat or Oats. It should, however, be allowed to remain standing until thoroughly ripe, especially if it is to be sold to breweries, for if the grain is allowed to thoroughly ripen before harvesting, a more mealy endosperm will be obtained, while if cut before it is ripe a harder and flintier grain is obtained.

MARKETING—Barley is sold upon the market either as a feed or brewing Barley. Its requirements for a brewing Barley are very exacting. There is very little of this grade of barley produced, as any discoloration or mustiness depreciates the value of brewing Barley, but when one secures a good grade of Barley it usually brings from 15 to 20 cents per bushel over that of the common feeding Barley.



Speltz (*Triticum diccocom*)

Grow Speltz and Cut Your Feed Bills. More Feed is Produced by Speltz Than By Other Cereals.

Emmer is a Russian Cereal closely resembling Barley although it is a species of wheat. In this country it is usually called Speltz. Although of comparatively recent introduction into the United States it has met with almost universal favor. It is successfully grown in all the northern states, in Alaska, and in the semi-arid regions it has been found especially well adapted, and in the Corn Belt is proving equally as popular. Emmer is a hardier plant than wheat and will give better results on poor soil and in a cold dry climate than any other cereal. Its straw is shorter and stands up much better. It is more drought, rust, and smut resistant than wheat, nor is it as easily damaged by rain in wet districts during harvest time. It matures a crop with the least amount of moisture of any of the cereals. In sections of the West and Northwest it may be grown where wheat, oats, and barley would be a failure. It is a crop of the utmost importance for the dry land farmer and those growing it under the Corn Belt conditions speak very flatteringly of its heavy yielding power and high food value. In feeding value the grain compares with Barley and the straw ranks next to Oats.

Why Speltz has a Place on Every Farm

1. It will produce a heavier yield of grain per acre than any other cereal.
2. It is relished by all classes of stock and they do well on it.
3. It will grow on land which would not produce a good crop of other cereals.
4. It endures drought and other hardships more readily than other cereals.
5. It will grow most anywhere.
6. It ripens early and neither rusts, blights, nor lodges.
7. It may be pastured and produces a nice quality of hay if cut at the right time.
8. It yields more than wheat or barley and is a better feed than barley or oats.
9. The straw makes good feed.
10. It endures frost.

There are many other reasons why you should grow this great crop.

A Heavy Yields of Rich Feed

Emmer, or Speltz as it is usually called, has made it possible for farmers in every nook and corner of the country to fatten stock cheaply. It yields much more than oats or barley and is of such high feeding value that it is the means of raising the most economical feed. It is a great economical grain crop for stockmen, dairymen or farmers with any number of livestock. All classes of livestock from poultry to cattle like it. It looks like barley but shell it out in your hand and you have a kernel that resembles Rye. Eat it and you will notice that it is crisp, and has a very pleasant taste. Stock of all kinds take to it more readily than either Oats or Barley and cows show a marked liking for it. It is a rich feed and is often fed with bran and shorts to milch cows. As a straight diet it is fattening and will put weight on hogs or cattle in a hurry.

Let Speltz help you cut down your feed bills. Grow the crop that produces heavy yields of the most nutritious feed. It offers advantages at this time of high prices when necessity demands farmers to grow grain of the highest productiveness.

Speltz has other uses. It is good for pasture, fattens in the green state, and is a heavy stooler. After harvesting a heavy crop of grain equal to anything you can raise, you have the straw which makes good winter roughage. If you are caught in a pinch without hay, Speltz makes good. The kernel, hull, and straw all are nourishing feed. Speltz is rich in protein, the most valuable of all food stuff and no farmer can afford to be without the means of raising it cheaply and safely.

The Feed Grain Crop for Stockmen

The enormous yield of rich nutritious grain, and the heavy yield of straw that is almost equal to hay, give to Speltz an advantage over other cereals. Feed it to any class of stock and you can put gain on them cheaply. Give it one trial and you will be convinced of its great possibilities. It produces the best kind of feed at the least cost. No matter in what section of the county you are located, you can get good results from it as it can be grown in every State in the Union. Cut your feed bill. Play safe, make sure you have plenty of feed and sow Speltz.

A Big Money Crop Easy To Grow

The cheapness and ease of growing Speltz commends it to general use. It thrives on most any kind of soil and seems to have no climatic limitations. Its vigor makes it unusually easy to get started as it flourishes under a great deal of neglect, and you may be certain it will thrive where other grain crops grow and in places where some of them fail. It produces under the most trying wet and dry conditions and there is no reason why it can't be grown on every farm producing grain of any kind.

It needs no special preparation of the seed bed as it can be sown on land prepared the same as you would for Barley, Wheat, or Oats. It may be sown earlier than most other crops as frost does not seem to injure it. The straw is shorter and stiffer than wheat and does not lodge or rust. It is sown at the rate of $1\frac{1}{2}$ to $2\frac{1}{2}$ bushels per acre depending on the soil and may be broadcasted or drilled. The proper time to harvest is when it is in the hard dough stage. Harvest it and then thresh it as you would other grain but use fewer concaves than you would for wheat as the outside hull is left on.

Varieties

White or Spring Emmer or Speltz is very similar to Barley in appearance and growth, and is especially adapted to the semi-arid districts of the Northwest, and can be relied upon to produce a fair crop even under the most adverse conditions. It produces heavy yields of grain, and straw which is equal in value to oat straw. Its extreme hardness and drought resisting qualities, together with yielding qualities that surpass any other cereal makes it a grain of the utmost importance to the farmers in the North and Northwest.

Our seed stock has been bred up from the most hardy, high yielding strains, and has been carefully re-cleaned and graded and we believe that we are in a position to furnish you with the best that can be procured, and we know that it will prove to be the cheapest and best feed which you have ever grown upon your farm.

Price—See green list for lowest prices.

GROWING THE CROP

SOIL—It will grow on any soil or in any climate where any other grain crop will grow.

PREPARATION OF THE SEED BED—It can be sown on ground prepared the same as that upon which you would plant barley, wheat or oats. It is sown broadcast or by the use of a press drill.

SEEDING—Emmer is usually sown at the rate of two to two and one-half bushels per acre. The frost will not hurt Spring Emmer or Speltz after it is sown. It may be put in much earlier than other cereals.

HARVESTING—Cut the grain when it is a little past the milk stage, when it will make a splendid grain and lots of straw.



Our New Marquis Wheat Not Only Makes the Largest Yield but the Finest Bread.

Spring Wheat

Wheat comprises one-fourth of the acreage, yield and value of all the cereals in the world. Wheat has been the staff of life for ages, with no other crop so close to the life of humanity. During the war we learned the vital importance and the real value of wheat, when the American Farmer was called upon to feed the world.

Three-fourths of the wheat-producing area of the world suffered during the war to such an extent that thousands of acres were devastated and thousands of other acres were left idle. To bring these lost acres back to production and to fill up the world's flour barrel as it was before the war will require time. The whole world is short of wheat, necessitating high markets. Now is the opportune time to make a fortune in raising wheat.

Get your share of the returns from this greatest of all cash crops, for this undoubtedly is the most opportune time for engaging in the wheat growing industry. The whole world wants wheat. There will be less acreage sown than before. The market will be strong. Now is the time to make money in raising wheat as never before. Choose the best variety, get good seed, and you will increase the yield.

Varieties of Spring Wheat

NEW MARQUIS

New Marquis is from a week to ten days earlier than any other variety. It was originated by Dr. Charles and William Saunders, of the Central Experiment Station, Ottawa, Canada, and is the result of crossing the Red Fife and Hard Red Calcutta, a native of India. By this cross breeding a variety has been produced having the remarkable characteristics of the earliness of Calcutta and the yielding and drought resisting qualifications of the Red Fife. It has a medium short straw, which is very heavy, rendering it less liable to lodge than the other varieties. The kernel is very hard, dark and plump. In fact, it is the most beautiful wheat we have ever seen. When you consider that this is the wheat which won the Championship Prize at the New York Grain Exposition, the \$3,000 prize at the International Dry Farming Congress held at Lethbridge, Alberta, and again winning in open competition the sweepstakes prize at the Dry Farming Congress, Tulsa, Oklahoma, you can commence to appreciate what a really great wheat it is.

New Marquis Wheat is the most productive variety which has ever been known, and no other variety of wheat combines earliness, productivity and quality to such a degree as does the New Marquis. Because of these most excellent qualities you cannot afford to sow any other variety of Spring Wheat, if it is at all possible to secure New Marquis.

We have an exceptionally fine lot of seed stock which has been grown for us by the best breeders and growers in the Northwest, and we do not hesitate to recommend our seed or place it in competition with any other seed stock which is being offered. It will prove the biggest money making proposition you have ever tried, and its superiority and quality and high yielding qualifications place it above all other varieties of seed wheat.

You cannot afford to grow the common varieties, as there is very little left after paying expenses and harvesting and mar-

keting the crop; when you can secure the seed for growing this remarkable variety for very little more money than inferior seed would cost you, you should not fail to take advantage of the opportunity to secure the seed stock for growing this most wonderful variety. See green list for prices.

Spring Rye

A cereal of comparatively recent introduction is Spring Rye. The fall sown rye has for many years been one of the leading cereals, but it remained for recent plant breeders to develop a strain of rye that could be profitably sown in the spring. In fact, only within the last two or three years has this cereal been grown in any quantities.

Our Strains of Spring Rye Big Producers

For several years we have been working along with the growers of this crop and we believe that we have Spring Rye that for quick development is hard to beat. Whether you want rye for growing a quick pasture or for producing a grain crop, we feel that the seed we are offering you cannot be beat.

The Advantage of Growing Spring Rye

Probably no other crop offers the unusual advantages that a crop of Rye does.

1. In years when one is short of pasture it will produce the quickest pasture that can be grown.
2. It can be pastured during the early spring and yet produce a good crop of grain.
3. As a fertilizer it is second only to the legumes.
4. It can be grown on thinner land than any other cereal.
5. The grain is threshed at a time when one is usually short of feed, and for young and growing pigs you cannot beat ground Rye.

When one stops to consider that any of the above reasons would in itself warrant one in growing this crop in preference to some of the other cereals. This is especially true in the case of the man who has a small farm and is compelled to get the most out of his land.

Rye is also an excellent crop for one to grow who keeps a lot of live stock on a small acreage, as it not only produces grain but pasture and forage as well. We believe that there is a place on every farm for at least a few acres of Rye. The feed lots can be plowed up and seeded to rye, or it can be sown in the thin spots where you failed to get a stand of corn. If you have any thin clay points, there is the place to sow rye. You will be surprised at the amount of fertility in a crop of rye turned under. Don't delay getting your seed, as there is never enough to supply the demand, and we are always forced to disappoint some who come late in the season asking for it. Prices—See green list.

A Big Bargain in Grass Seed

We wish especially to call your attention to the advantages offered in buying our Alsike and Timothy Mixed this year. We went out early last fall and contracted for several million pounds of this seed, and we are going to give you the advantage of our early purchases and save you a lot of money on your seed supply.

Seed Corn

The so-called Lake region probably offers one of the most difficult problems in the United States. The average coolness of the season makes it extremely difficult to secure seed suitable for growing here in Northern Illinois, Southern Wisconsin, Michigan, and Northern Indiana. In order to meet this situation we have made a careful study of conditions here in the Great Lakes region, and have spent a lot of time and money developing varieties suitable for growing in this particular section. We believe that we are in a better position to furnish you varieties of corn that will prove a real benefit to you than any other firm.

We Make a Specialty of Corn Suitable for the Northern Half of the Corn Belt

While we handle corn suitable for growing in most every state in the Union, our specialty is early maturing corn, suitable for growing here in the northern part of the Corn Belt. The seed we sell for growing in this region is grown here in Northern Illinois, Michigan and Wisconsin. Being acclimated to this particular locality makes our seed especially desirable for growing in the Great Lakes region.

Our Early Yellow Dent has been developed here in Northern Illinois and has proven to be especially adapted not only to the Great Lakes region but to the Eastern States where a variety of corn that will mature reasonably early is desired.

The Illinois Special

This variety of corn has been grown throughout Central Illinois for a number of years and has proven one of the most popular varieties ever introduced. It is not an early corn, but only a medium maturing variety, maturing in from 110 to 115 days. This is the big heavy crop kind, the one that will break down the corn crib and choke up the elevator. The corn that has placed Illinois on the map as the greatest agricultural state in the Union. No one who has never seen this corn can appreciate its wonderful qualities, and we do not hesitate to recommend it as the best and heaviest yielding corn that has ever been introduced. It will swell your profits and increase your bank account; this is the kind of corn that pays off the mortgage on the old home; it's a regular mortgage lifter.

It is the Stockman's Favorite

There is no better feeding corn grown than the Illinois Special. A chemical analysis of this variety shows that it contains a high percentage of oil and carbohydrates, the most necessary constituents in making up a fattening ration. These are the elements which tell you what a bushel of corn is worth when it comes to putting a gain on a bunch of cattle. This is the kind of corn which makes you smile when the cashier hands you the account of sales on a bunch of cattle that you thought cost too much money when you put them in the feed lot. It's the kind of corn that makes a man money on these high priced feeders, for the richer your corn in oil and carbohydrates the more gain you will get from each bushel of that corn you feed. This is the variety that the most successful feeders agree is the "best cattle corn." Try a few bushels of this great feeders' favorite and you will be convinced of the exceptional feeding qualities of this wonderful variety.

Description

This variety is not a show corn, it is too large for a show corn. But it's the corn that grows the bushels. The ears range from 10 to 12 inches in length, and from $7\frac{1}{2}$ to $8\frac{1}{2}$ inches in circumference, with from 16 to 18 rows. They are cylindrical in shape with well filled butts and tips and weigh from 14 to 18 ounces. The cob is rather large, and is well covered with deep, broad kernels of a rather dark yellow color, shading off in some cases to a reddish cast. The germ is exceedingly large, which makes it such a strong, vigorous grower, withstanding wet and cold weather to a considerable degree.

The Seed of This Variety Has Been Carefully Selected

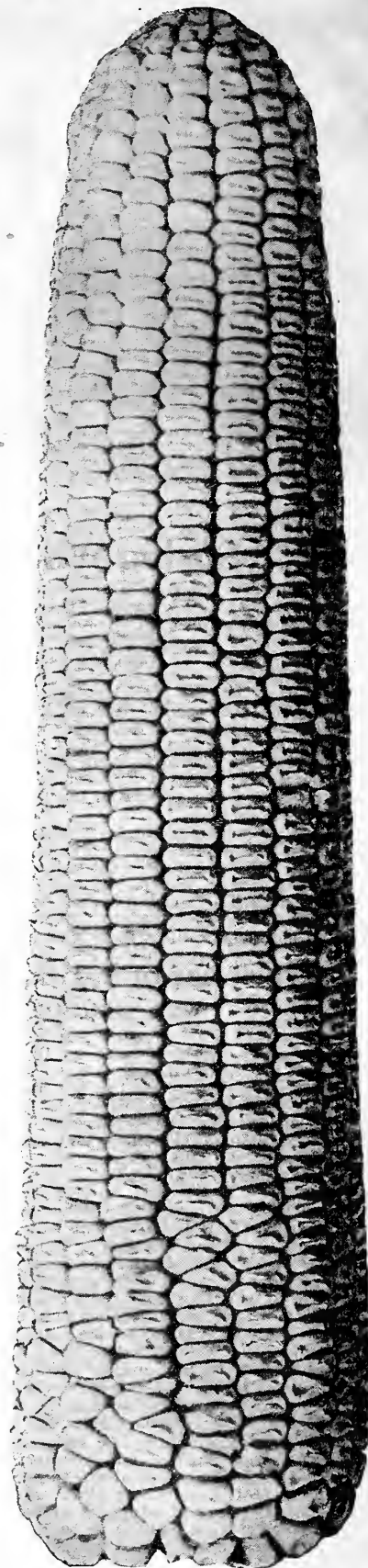
The seed we are offering you of this variety has been carefully selected, graded and stored, and we know that it will please you. This is one of the best varieties of corn we know of and if you are not growing this corn we would urge you to do so at once. Price—See green list for prices.

Reid's Yellow Dent

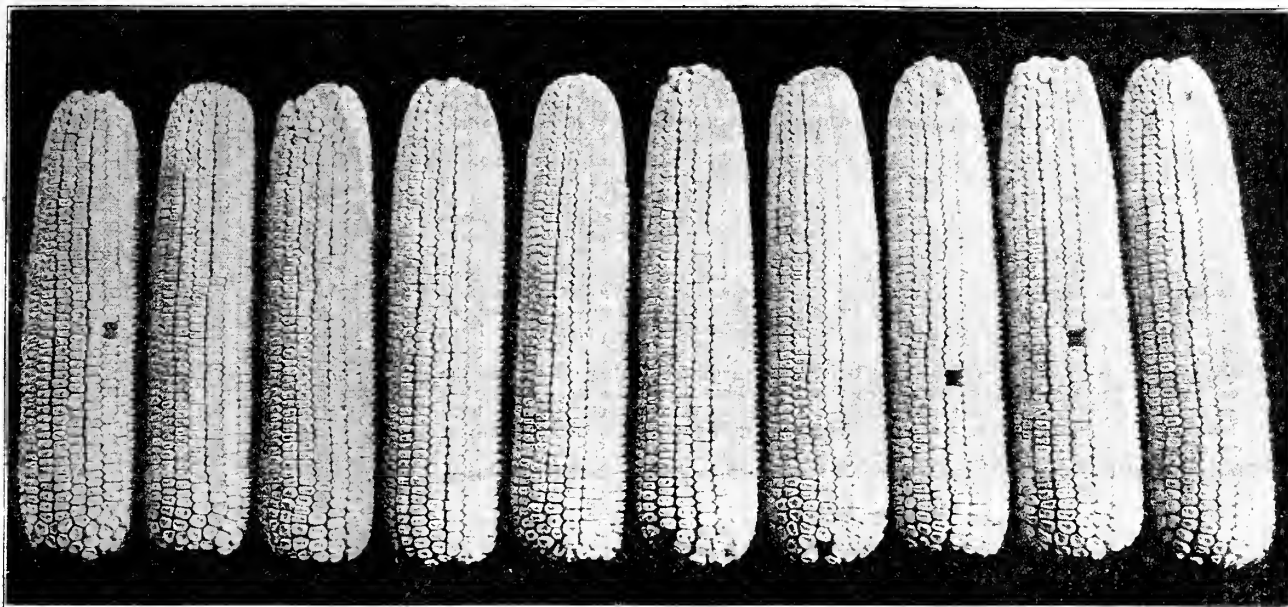
The old standby of the Corn Belt, the variety that has won more grand championship prizes than any of the other varieties at the leading corn shows throughout the United States. The ears are of medium size, are very uniform and of a bright yellow color. It is a deepkerneled, small cob corn, giving you a very high shelling percentage. It matures in from 115 to 120 days and is especially suited to the central and southern half of the Corn Belt.

The strain of Reid's Yellow Dent which we are offering has been especially bred up for its high yielding qualities and for good strong land we do not believe you will find a variety of corn which will produce the bushels for you that our Reid's Yellow Dent will. The members of our firm, I think we can say without fear of contradiction, have done as much if not more actual breeding work with this variety than any other seedsmen in the United States and we feel that in offering you seed from these high-yielding parent ears that we are offering you a grade of seed corn you cannot secure elsewhere.

Description—Our type of Reid's Yellow Dent is somewhat rougher than that of most breeders, but we believe we have a strain of Reid's Corn which will dry out quicker than the old smooth type and one that is much better feeding corn than the old type, as the kernels are not as flinty. The ears range from 9 to 11 inches in length, are cylindrical in shape, with well filled butts and tips and straight rows. The kernels are very deep and of a light golden yellow color. Don't fail to secure some of this corn for that sod land which you are breaking up this year, for there is no other variety that will yield you the bushels which our high yielding Reid's Yellow Dent will produce.



Illinois Special.



Illinois Ideal Always Produces a Heavy Yield of the Very Finest Corn.

Illinois Ideal

The Great White Corn of the Corn Belt

This is one of the largest varieties of white corns known, and it can be grown over a wide range of latitude. Farmers as a rule are getting tired of small-eared varieties of corn, what they want is a large ear with lots of corn on it, and to meet the demand of the wide-awake, progressive farmer for a variety of white corn that is large enough to secure an enormous yield and early enough to mature throughout the corn belt, we are introducing our Illinois Ideal, for we believe without a doubt it is the largest early maturing corn that has ever been placed before the American farmer. It is very productive, and its strong, vigorous stalks, that often have two large ears to the stalk, will make you wish you had planted all Illinois Ideal. Its great advantage over all other varieties in size and number of ears makes it possible to secure thirty-five or forty bushels more per acre than from common size corn.

Description—The Illinois Ideal is a white corn, whose great size and number of ears on the stalk gives it a decided advantage over other varieties of white corn. The ears range in size from 11 to 13 inches, and are large around according to their length. The ears are quite cylindrical in shape and are well filled over butts and tips. The kernels are rather large, slightly dented and of medium length. The rows are usually quite straight and the ears weigh from one to two pounds. The Illinois Ideal is certainly a wonderful corn, and under ordinary corn belt conditions will produce a sensational crop.

Owing to unsettled conditions we are unable to quote firm prices. See list enclosed.

Improved Iowa Silver Mine

The Reliable Mortgage Lifter. This variety of white corn, because of its ability to produce bountiful crops even under the most adverse conditions, has long been regarded as the corn to meet every condition of soil, rainfall, temperature and tillage, or as "Topsy" would say, "It was not raised, it just grew," and if any variety of corn will just grow, Silver Mine will do it, for its deep root system enables it to withstand a maximum amount of drouth, and its ability to mature in 110 days insures its producing sound corn even during the most trying years.

Description—The ear is cylindrical in shape, has a small cob, the kernels are deep and rough and of a creamy-white color. The stalk is a little below the average height, and the root system is stronger and more vigorous than in any other corn, giving this variety the reputation of being able to stand more extremes of drouth and heat than any of the other varieties.

Our seed stock has been very carefully bred up and we are in a position to furnish you with something extra good.

Owing to unsettled conditions we are unable to quote firm prices. See list enclosed.

The New Corn, Planter

Our Blue Ribbon Pedigreed White Seed Corn

This variety is an improvement on the old "Boone County White." In it you will find a white corn that will meet with your approval anywhere it will mature. This is the show corn of the white varieties, and if you are looking for a white corn of good size and maturing in from 110 to 115 days, you cannot beat the Corn Planter.

The Corn Planter is without a doubt the best variety for a combination crop for grain, fodder and ensilage purposes that there is in existence, and it is considered by many to be the best breed of white corn known.

Description—The Corn Planter is a pure white corn, the ears averaging from ten to eleven inches in length and big in circumference in proportion to its length. It has from twenty to twenty-four rows of kernels, the grains fitting very tightly together, the butts and tips are well covered with deep, well-shaped kernels. It matures in about 110 days, making it a very desirable corn for growing throughout the central portion of the corn belt. It has a strong, vigorous, well-braced stalk, with the ears on a short, medium sized shank, and while the ears lop over because of their weight they do not blow off readily as in the case of many other large eared varieties.

Owing to unsettled conditions we are unable to quote firm prices. See list enclosed.

Saint Charles White

The Great Ensilage Corn of the Corn Belt

St. Charles White is distinguished by its red cob and chalky white kernels, which make it very much in demand by the millers for its extreme whiteness; produces a meal that cannot be duplicated by any other corn, and they will pay a premium for it. This corn is a very heavy yielder and is grown very extensively in many sections of the Corn Belt, for it not only yields a heavy crop of large, well shaped ears, but its heavy foliage makes it one of the most desirable fodder crops, and for ensilage it cannot be surpassed.

If you are growing White Corn for the market you cannot afford to be without the St. Charles White, for the additional revenue which it will bring you is a feature which you cannot afford to overlook.

Description—The ears are cylindrical in shape and large in size, ranging from 9 to 12 inches in length, with deep, medium rough kernels, whose chalky whiteness usually makes them command two to three cents above the market.

Our seed stock is of the purest grade, and while our prices may seem extremely modest for such exceptional quality, we wish to again call your attention to the fact that we are field seed specialists and handle hundreds of bushels of each variety, while other firms who handle smaller amounts necessarily can not handle them as cheaply as we do.

Owing to unsettled conditions we are unable to quote firm prices. See list enclosed.

Early Dent Varieties of Corn

Early Yellow Dent

In order to meet the demands of the farmers in the northern part of Iowa, Illinois, Minnesota, the Dakotas, Wisconsin and Michigan, for a regular type corn which would generally ripen for them, we have been breeding up our Early Dent. We took as a base for producing this early corn the genuine Johnson type of Reid's Yellow Dent, and by making field selections we experimented in producing an early corn which although not quite as large as the original Reid's Yellow Dent is a corn of fair sized ear, which will mature in about 100 days and we believe after seven years we have succeeded in fixing a type which is extremely early and will under ordinary conditions mature anywhere that corn can be grown.

This variety has proven very successful in the East and has ripened there where they thought it was impossible to grow anything but flint corn. We do not hesitate to recommend this variety to any of our customers wishing to secure a variety of Early Dent, and we believe that it will mature for you earlier than any other Dent corn which you can secure.

Description—It is of the smoothest true Dent type, instead of being rough like the Johnson type of the parent ears. The grain is somewhat harder and has a rather flinty appearance. The stalk is thick but short and the ears are very uniform, both as to height on the stalk and size of ear; the cob is quite small, the kernels are of medium depth.

Owing to unsettled conditions we are unable to quote firm prices. See list enclosed.

Silver King

The Great White Corn of the North

Silver King is one of the most useful varieties ever originated. It has been the means of extending the corn growing industry over a greater amount of new territory than has ever been done by a single variety. It was developed by Professor Moore of Wisconsin, who gave it the name of Wisconsin No. 7. It is especially adapted to growing in those latitudes where no other variety of Corn will mature. It has given phenomenal results in Northern Iowa, Minnesota and Wisconsin, and it is a Corn which stands to give a good account of itself wherever planted, for it is an exceptionally heavy yielder, and there is no doubt it has revolutionized the Corn growing industry in the North.

Description—The ears range from eight to nine inches in length, are very uniform in size and type. It is a pure white dent Corn; the ears are filled out well from butt to tip, the kernels are of good length, set compactly in straight rows, and it is early enough to mature in from 100 to 105 days. If you are in the extreme northern part of the Corn Belt you should certainly grow this variety. There is no corn so well adapted to your conditions as Silver King.

Owing to unsettled conditions we are unable to quote firm prices. See list enclosed.

Pride of the North

The Great 90-day Corn

This most excellent variety of 90 day corn was originated by Mr. Goddard in Kossuth County, Iowa, and it became at once one of the most popular strains of early corn and as a catch crop to fill in with it has no equal.

This variety of corn does not require the space that larger varieties do and as you can grow four or five stalks to the hill, it is surprising what an enormous amount of corn you will secure from an acre from this variety. It often occurs that this variety planted very late in the season will out yield the larger varieties.

This variety is grown very extensively throughout the northern part of the corn belt and it has proven to be one of the very most popular varieties grown in that section. We can recommend this corn to anyone wishing an extremely early variety, for it is certainly a heavy yielding, strong, vigorous early variety that will give you the best of results.

Description—The ears are of medium size, being about eight inches in length and quite large around in proportion to their length. The kernels are deep and of a rich yellow color and pinched dent. The stalks, although short, are large and very vigorous growers.

Owing to unsettled conditions we are unable to quote firm prices. See list enclosed.

Red 90-day or Early Bloody Butcher

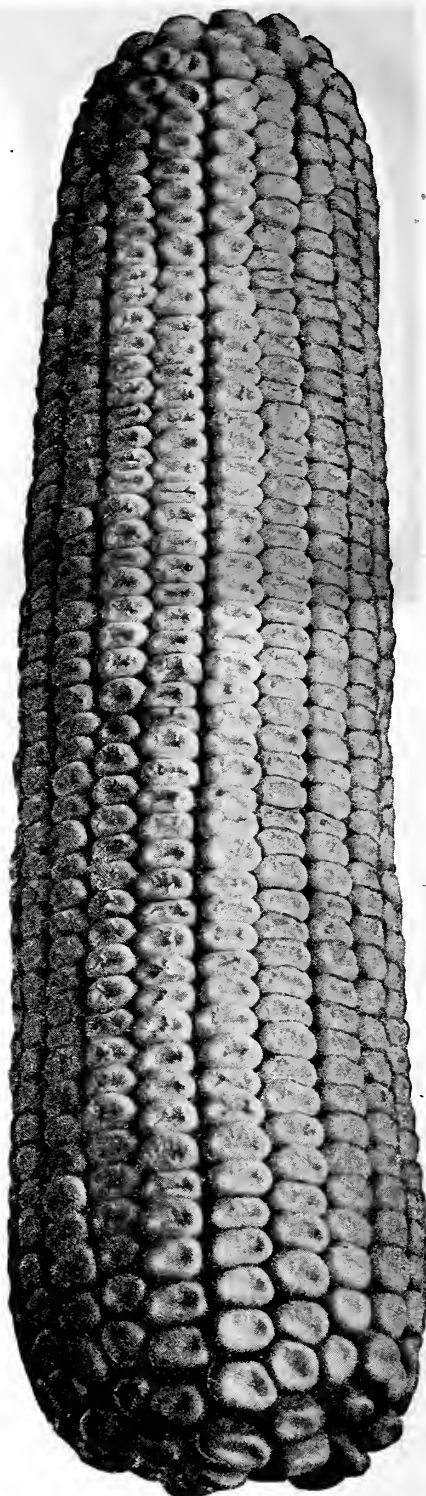
This variety of corn is a native to the State of Illinois. It has been carefully selected and kept true to type by some of the best growers in the State and is one of the most popular Extra Early varieties grown.

If you have to replant late in the season we know of no variety that will give you any better results than this White Cap Bloody Butcher, for it seems to have the ability to produce a crop when all others fail and it is surprising what a yield one can secure from this corn even under the most adverse conditions.

Many growers follow the practice of planting a few acres of this corn at the time when the main season crop is being planted, for it produces an abundance of early feed, which can be utilized two or three weeks before the other corn can be fed. As old corn is usually very high in price at this time this variety works into the cropping system very advantageously and often is the means of saving a big feed bill. You should at least grow a few acres of this corn to insure you against a shortage of feed during the late summer.

Description—In color it is cherry red with a white cap. The cob is of medium size and white in color. The ears are from 8 to 9 inches long and usually have 14 rows. The stalks are of medium height and the kernels dented. This variety will make a crop as far north as Minneapolis.

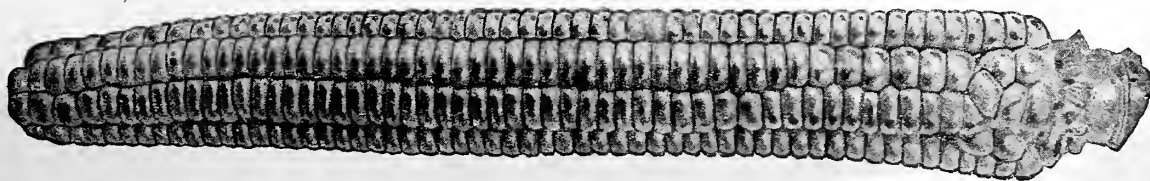
Owing to unsettled conditions we are unable to quote firm prices. See list enclosed.



Early Yellow Dent.

Don't Expect Too Much

Don't expect every ear of seed Corn we send you to be perfect, for it is an impossibility to get such Corn. We are sending you the very best quality of Corn that we can secure and Corn that we feel will give you good satisfaction. Remember that every order we ship you is backed by our Absolute Guarantee.



Early Yellow Flint.

Extra Early Varieties

We are in a position to take care of our customers very nicely on extra early varieties of corn, as we make a specialty of growing corn especially suitable for growing in the extreme North, where the seasons are so short that they do not permit you to grow the dent varieties, and also for growing in the South, where the intense heat and drought make it impossible to grow any of the larger varieties.

We are always in position to take care of our customers who meet with disaster with their corn crop by reason of floods, hails, etc., and always lay in a supply and get it all ready to ship out, so we can meet the rush orders which come in and cover us up late in May and during the month of June, and you cannot conceive of the corn which goes out at this season of the year on telephone and telegraph calls to rush them by express. So if you should need some of these varieties post haste, remember we carry a large stock and can make quick shipments.

Owing to unsettled conditions, see green list for prices.

Minnesota King

This variety of corn is what may be termed a half dent. It is a cross between a flint variety and a dent. This variety can be depended upon to produce a crop and seems to have the ability to produce a crop when all other varieties fail and it can be regarded as one of the hardiest varieties of corn known.

Description. The ears are good sized, eight rowed with very broad kernels of an extremely rich yellow color. In appearance this variety is quite markedly distinct on account of its rich yellow dent characteristics. The stalk is of average height with a very heavy root system and ears about three feet from the ground, often producing two and three ears on the same stalk.

Silver Triumph

This is a pure bred large white variety of flint corn. It is very productive and very early maturing as it matures in from 75 to 85 days. This variety is used quite extensively even in sections of the Corn Belt where larger varieties can be grown. Because of its early maturing qualities it furnishes early feed at a time when feed is high and scarce, and as it is a very prolific yielder can be grown to an advantage for such a purpose.

Description. Silver Triumph is a large white slender ear, averaging around a foot in length. The kernels are broad and thick; it has more stalk than other varieties of flint corn and usually produces two ears on the same stalk. This variety can be planted as late as the first of July in the Corn Belt and mature a crop. It is especially adapted to the New England States, but can be grown anywhere that an early maturing corn is desirable.

Sanford's White Flint

This is one of the standard varieties of flint corn, ripening in from 75 to 85 days, and is very productive. This variety has given excellent results in Minnesota and the Dakotas and has proven a very popular variety wherever grown, especially for ensilage and soiling purposes, as the stalks are quite leafy.

Description. Sanford's White Flint is an eight rowed white variety with ears averaging from ten to twelve inches in length, two to two and a half inches in diameter, cob small, the kernel large and broad. The stalks grow very tall and usually have two to three ears on each stalk.

Our Improved Early Yellow Flint

This variety of flint corn has been bred up by us especially for the purpose of meeting the demands of our customers who are located in such a latitude that they must have a corn which will mature in from 75 to 85 days. This corn is especially adapted to the Northwest and New England States. It is often used here in the Corn Belt for replanting.

Description. Our Improved Early Yellow Flint is an eight rowed flint variety with ears ranging from ten to twelve inches in length and one and a half to two and a half inches in diameter. It is extremely well filled at both butt and tip and the kernels are large, broad and of a very distinct yellow color.

Longfellow Flint

This is one of the most popular flint varieties known. It ripens in from 75 to 85 days and is very prolific. It is grown very extensively in the extreme North.

Description. Ears are cylindrical in shape, very long, a color of rich and glossy yellow, weight of seed 60 pounds to the measured bushel. The kernels are large and wide and the cob very small. The stalks average about seven and a half feet in height and the ears about three feet from the ground.

Evergreen Sweet Corn

This is the standard variety of sweet corn grown for fodder purposes. It produces an enormous amount of sweet and succulent forage per acre. It comes on very early and when fed to stock they will consume stalk and all. For fodder it cannot be beaten as it makes a fodder which is more palatable than the field corn fodder and the stock will clean it up better than any other kind of fodder which can be grown for them.

Popcorn

Popcorn can very often be grown to advantage in a commercial way and no farm is complete without a few rows of this delicious confection; for who does not recollect with pleasure bleak winter evenings enlivened by a dish of delicious popcorn. One of the sacred duties of parents is to provide for the children an atmosphere of gaiety and happiness. Nothing will promote good fellowship in the farm home like allowing the youngsters to grow a few rows of popcorn, that they can pop during the long winter evenings.

Price—25c per lb., postpaid; 25c per quart, your expense. See green list for larger amounts.

GROWING THE CORN CROP

Soil. The most satisfactory soil for growing a bumper crop of Corn is a rich, black loam, rich in organic matter.

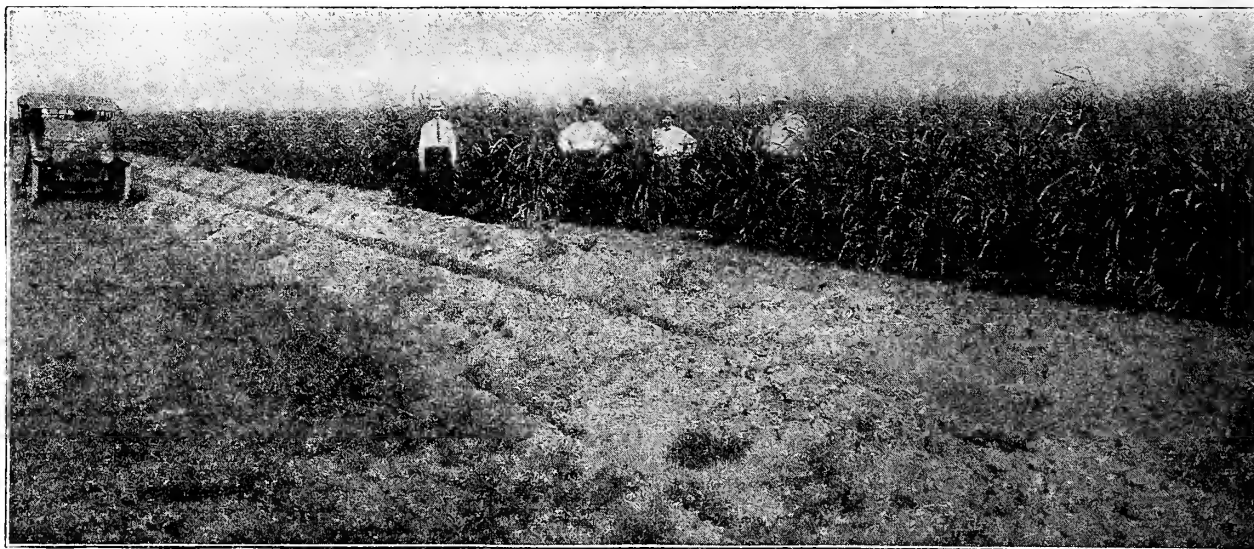
Preparation of the Seed Bed. This feature of Corn growing depends upon what kind of land this crop is to be grown upon. In case it is fall plowing it is usually double disked and given a couple of harrowings, and it is ready for the planter or the lister.

In the case of land which was in corn the year before, it is usually double disked, harrowed and plowed, the plow being closely followed by the harrow to work up a fine seed bed.

Planting. Corn may be either drilled or checked. Checked corn is the most popular method, three kernels being dropped in a hill, three feet four inches or three feet six inches apart.

Cultivation. Many methods of cultivation are practiced in growing corn and most any of them are successful if conscientiously carried out. The main fact to keep in mind in the cultivation of corn is to keep the ground moving and see that it is thoroughly done each time and that it is not too long between cultivations so that the ground will have no chance to crack and settle.

Harvesting. Corn is either husked from the field by hand or with the corn husker, or else harvested with a corn binder and placed in shocks from which the corn may be husked by hand, or run through a shredder, fed from the shock with the corn on the stalk, or placed in the silo.



Sudan Grass

The Greatest of All Annual Forage Crops

Sudan Grass is the most recent discovery in the way of a hay and pasture Grass. But ten years ago it was grown from less than one-half pound of seed secured by Prof. C. V. Piper from the Sudan Government at Khartum. Today the amount of seed sown will run up into the millions of pounds. Sudan Grass has spread like a weed and is known in every state in the Union. Withstanding protracted drought drew first attention to it but its bountiful yields of hay brought it into favor with farmers and won it fame to such an extent that as high as \$1.50 per pound was paid for the seed during the early years of its culture. The plant stools wonderfully, as many as 100 stems have been counted from a single seed, and this accounts largely for its yields of as high as 8 tons per acre. Sudan is used for pasture, ensilage and soiling as well as for hay. All farmers who have fed it in any form find that cattle relish it, horses do well on it and makes a very good winter roughage for young stock and dairy cows. It will yield so much more than milo or millet that it has been replacing them very swiftly.

The Ease of Growing It

Sudan seems to be one crop without soil requirements. It does its best on a rich loam, but it has been grown successfully on almost every class of soil from a heavy clay to a light sand. It is sown after the soil has become warm, usually about corn planting or a little later, and will do best in a rather firm seed bed sown at the depth of one-half to one inch. The best machine to use in regions of abundant rainfall is the common grain drill. Good cleaned seed feeds freely and can be evenly distributed. Unless the ground is poorly prepared or apt to be weedy 15 pounds of seed is sufficient. In semi-arid regions or where the crop is grown for seed it may be put in rows 36 to 42 inches apart and cultivated. But four pounds of seed are needed and heavy yields gotten but against this method is the labor of cultivation and the tendency of the hay to be coarser. The most common way of harvesting is to cut when in full bloom with a mower and handle like millet. Many successful growers prefer to cut it with a binder and place it in shocks, as the hay being long is apt to tangle and is harder to handle loose than when in bundles. The time of cutting Sudan Grass may be prolonged longer than with other hay without injuring the quality as the leaves are held fast and there is little or no change in the nutrients.

Sudan and Legume Mixtures

Sudan grows strictly erect with stems stiff enough to support the vines characteristic of most legumes. This affords easier harvesting and quicker curing. The hay of this inter mixture is well balanced due to the protein content of the legumes. The yields are good. At Arlington farm, Virginia, the mixture of Sudan grass and cow peas gave a yield of 4.6 tons of cured hay per acre, and mixed

with Soy Beans the yield was about the same. The old saying goes, "Great oaks from little acorns spring." So have some of the greatest crops had very humble beginnings. Sudan Grass started in this country from a one-half pound sample. This spring we handled nearly a million pounds of it. A small envelope was the start of Rosen Rye.

Facts About Sudan

No serious weed pests interfere with Sudan or is it bothered by moles, squirrels and other rodents that often damage perennial crops.

Sudan recovers rapidly from being cut. The time of cutting is not as exact with Sudan Grass as other crops. Sudan being an annual, may be fitted into any rotation without trouble. Sudan works into mixtures very nicely with Soy Beans and Cow Peas forming a well balanced feed. It makes the best soiling crop you can grow.

It is a good producer of seed. It has no such creeping root system as Johnson Grass and can easily be eradicated.

A Catechism on Sudan Grass by a Leading Authority

Q. Where will it grow? Can it be grown in the North, on thin land?

A. It will grow anywhere that field corn, cane, milo, or kaffir can be grown, and besides will thrive where it is so dry that none of these can be grown.

Q. What are the objections to it?

A. None so far as anyone has been able to find out yet.

Q. How should it be planted, drilled or broadcast, and why?

A. The best way to plant it is to drill it in rows corn row width and cultivate like corn. This takes from two to five pounds of seed per acre. Many people, in order to save the work of cultivating, sow it broadcast or drill it with a wheat drill, using about 20 pounds of seed per acre, and handle it with a grain binder.

Q. How does it yield? Will it yield more than other fodder or hay crops?

A. It will yield two or three times as much as either cane, kaffir, milo, or millet and make far better feed.

Q. What is Sudan grass anyway?

A. It is an annual plant of the sorghum family, supposed to be the parent type of all the sorghums. It is an annual, dying when winter comes. It looks like sorghum, but is much more slender, more leafy, fine stalks, and stools like wheat.

Q. What is it good for?

A. It is grown for stock feed, and can be either cut and fed green or cured as hay.

Q. Will stock eat it, and is it good for them?

A. All kinds of stock eat it readily, and it is especially good for horses, mules and cattle, in fact a better feed than any other hay except alfalfa.

Q. How is it better than corn, or kaffir, or millet for fodder hay?

A. It is richer feed than either, makes more leaf and less stalk than either cane or kaffir, cures easily, and will not sour or spoil like cane so often does. Besides it will make a crop on less moisture than any other crop known.



Kaffir produces heavy yields of the most succulent forage. It can be grown on almost any soil and in most any climate and is the solution for the Feed Bill Problem on every up-to-date farm. Its hardness makes it a very valuable forage crop.

Cane Seed

Cane is without doubt one of the greatest producers of high quality forage which has ever been discovered. The West has learned to appreciate the wonderful qualities in this great forage crop, but the East yet has much to learn about it, for they have not learned to take advantage of this most excellent plant for producing their silage and fodder.

The cane plant produces from three to eight tons per acre of cured forage and it may be grown from Canada to Mexico and it will withstand drouth and other unfavorable conditions that would mean death to any other crop.

Many are prejudiced against this crop because of fatalities among livestock which they have heard of from time to time and many of which were made out of whole cloth or grossly misrepresented. It is true that cane under certain conditions has proven poisonous, but such cases are so rare that they are very nearly a negligible quantity. Many make a practice of cutting cane two or three times during the summer, but we prefer to sow the cane quite thickly so that it will not grow so rank and coarse and then cut it just after the first light frost, and we have found that on our own farms this has proven to be the most satisfactory way of handling cane both for ensilage and for fodder. The variety used for fodder is slightly different from the variety used for syrup purposes, as the stalks are somewhat more slender and more easily cured.

The Early Orange Top Cane Seed

This variety is somewhat later than the early Amber, but it is a very heavy producer of foliage, and because of this fact, and that it is thought by some to be more drouth resistant than the other varieties, it is in more demand throughout the South and Southwest, but for the farmer in the corn belt and Eastern States we believe that the Early Amber will give the best results.

Owing to unsettled condition of the market we ask you to refer to price list enclosed.

Early Amber Cane Seed

The Early Amber is the most common variety of Cane grown; there are two ways of planting it; one is by broadcasting, sowing from one to two bushels per acre, the other is to drill with a corn planter and cultivate the same as you would corn. It can be grown on any soil or in any climate from Maine to California. It will thrive on the richest land you have, or on the poorest, and it is one of the greatest destroyers of obnoxious weeds in existence. It can be sown any time from April to July and be harvested any time between the time it is a foot high and the first freezing weather. Try a little cane this year; you will be surprised at the wonderful results you will secure from it.

Owing to unsettled condition of the market we ask you to refer to price list enclosed.

Kaffir Corn

This is, without doubt, one of the most valuable fodder crops for the Western and Southern States. It is quite drouth resistant and is valuable both for fodder and grain and many farmers in the Southern States are using it for ensilage in preference to corn. In the Southern and

Western States it is sown in rows and cultivated the same as field corn, but in the corn belt states it is usually sown broadcast at the rate of from 75 to 100 lbs. per acre, and when handled in this way, it produces excellent forage, as the stems are small and fine.

In the southern part of the corn belt and throughout the great Southwest it is the principal grain crop grown. Many fields often produce at the rate of 50 bushels per acre. It is an excellent food for poultry and no farmer should be without at least a few acres for this purpose alone.

Our seed stock has been secured from a section where special efforts have been made to produce not only the highest yield of grain per acre, but also to produce the maximum amount of high class forage. Special care has also been taken with our seed stock to preserve its germination, and since Kaffir Corn loses its germinating qualities more quickly than any other seed when not properly handled, you should make sure that your Kaffir seed comes from a reliable source.

Owing to unsettled condition of the market we ask you to refer to price list enclosed.

Feterita

This is a new grain which has recently been introduced by the United States Department of Agriculture from Egyptian Sudan, and it has proven one of the greatest blessings to the farmer in drouth stricken regions that has ever been introduced.

It very much resembles the Kaffir plant in appearance, but the heads are more blocky and it is a much bigger yielder of grain. The seed very much resembles that of Kaffir corn, but is of a pearly white color. It is very much earlier than Kaffir corn and has been grown very successfully after a crop of Kaffir or field corn has been destroyed and it was too late to plant either of them again. One seed often produces from six to eight shoots as it stools very heavily; for this reason you should not sow as thick as Kaffir corn. It may either be sown in drills or broadcast, but in most cases it is sown in drills and cultivated. Very astonishing results have been obtained with this great grain crop in Oklahoma. It is one crop that will beat the hot winds and drouth.

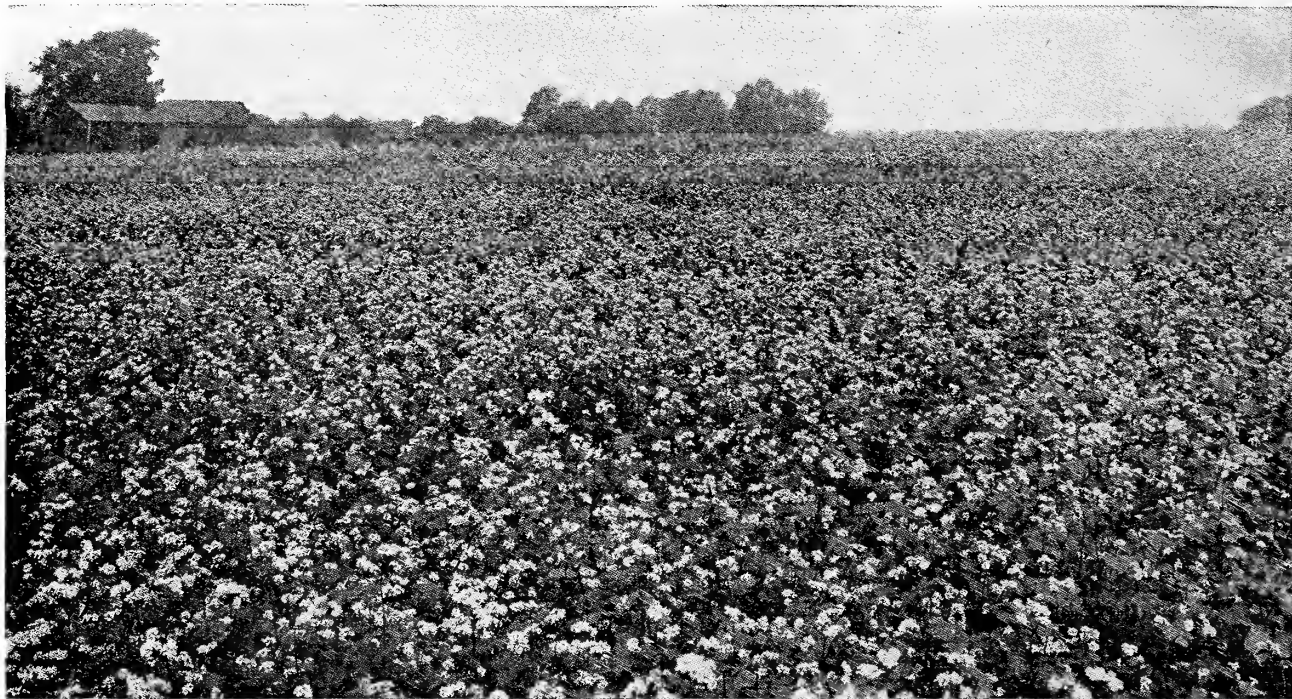
The feeding value of Feterita as a grain or as forage is equal in every way to Kaffir, many prefer the grain to that of Kaffir corn because of it being softer and not requiring grinding before feeding.

Owing to unsettled condition of the market we ask you to refer to price list enclosed.

Russian Flax

This is the variety almost exclusively grown in the Northwest. Our seed has been grown on clean, new land and it contains no mustard. Although you can secure Flax seed almost anywhere in the Northwest, Flax seed containing no mustard is hard to get, for the reason that but few seedsmen are equipped to clean mustard from Flax, and even in case they are, it is an expensive process, and large quantities of seed are sown containing mustard, which is in a large measure responsible for this pest becoming so prevalent.

PRICE—At the time of going to press the market is in a very unsettled condition, and we are going to ask you to kindly write us for prices before buying.



A Field Like This Means Money to the Owner.

Milo Maize

Next to Kaffir Corn, Milo Maize is probably the best known of the grain sorghums. It grows larger heads and produces a slightly larger grain, the heads are slightly drooping and it can be grown with less moisture than Kaffir Corn.

See price list.

Broom Corn

The price of Broom Corn has advanced until it has become one of the most remunerative crops. We are getting some very fine seed from a grower in Oklahoma, who makes a specialty of high grade Broom Corn. It is one of the best paying field crops that can be raised in many localities, and it will certainly pay you to investigate and see if you cannot raise this crop to a profit. Better try a small patch this year, at least enough to make your own brooms, for you can for a few cents get sufficient seed to raise enough corn to make brooms which if you had to buy them at 50 cents apiece would cost you a nice little sum.

We handle two varieties of seed, the Improved Evergreen and the Dwarf Evergreen.

See price list.

Pencillaria

Pencillaria is a new fodder plant with very heavy yielding qualities, producing a heavy growth of broad dark green leaves, which are very nutritious and resemble very much those of corn. It is a native of Central America and it is claimed by some that if the plant is allowed to grow until the seed is formed it will produce the heaviest crop of forage of any plant in existence.

It should be planted in drills, six inches apart for it stools very much like wheat. It should not be planted, however, until about corn planting time. It should not be covered over a half inch in depth, then cultivate the same as you would corn. It is an enormous grower.

See price list.

Jerusalem Corn

This is a most excellent crop for dry countries and phenomenal records have been made by it under the most adverse conditions. It grows about three feet high, makes one large main head and several smaller ones. The grain is pure white and is good feed for all kinds of stock, and in some of the drought stricken countries it has been used as human food. It should be sown in drills at the rate of about five pounds per acre and the crop handled in every way the same as Kaffir Corn.

See price list.

Buckwheat

Buckwheat is much underestimated by the farmers of the United States today. It is often looked upon as a crop to be sown as the last resort where some other crop has failed or where some particular plot of land has been in such condition that it could not be put in condition to seed until too late for the sowing of any other crop. The real value of Buckwheat is that it may be worked into rotation and used in a two crop system for seeding the land upon which a crop of winter wheat or rye has been grown to this crop late in July or early in August and harvesting a second crop of grain from the land with little extra labor.

Buckwheat is one of the best cover crops that can be grown in the orchards and the flowers are very much relished by bees. Buckwheat is the cool season's crop and one which can be sown very late in the season and will produce very satisfactory returns. It can be handled at a time when other crops are not needing attention and we believe it should be much more generally sown than it is at present.

GROWING THE CROP

Soil. Buckwheat is a rapid, vigorous grower and will do well on the poorer and lighter soils. While it is best adapted to a somewhat sandy, well drained soil it will flourish on the heavier soils and when grown upon heavy clay soil it is said to leave the soil in a very mellow condition.

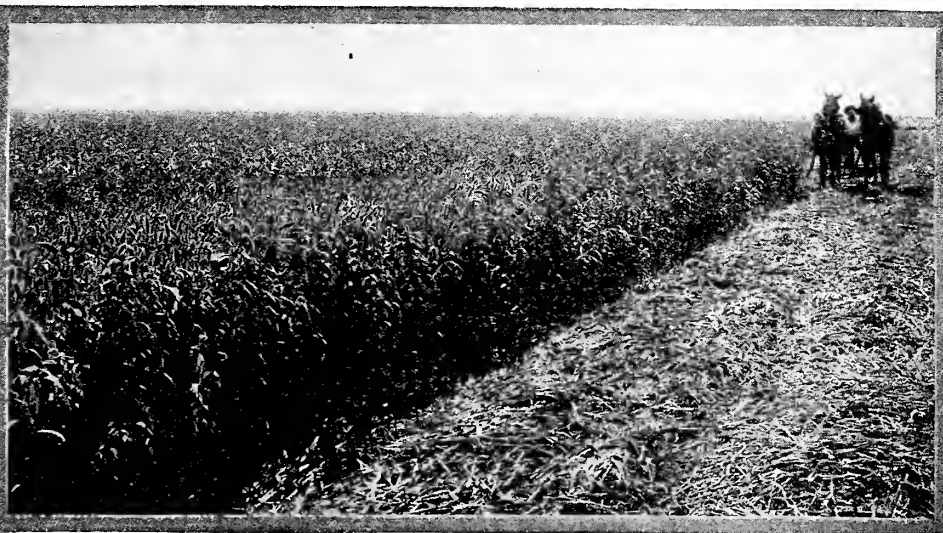
Seeding and Tillage. The ground should be prepared as for other cereals and it may be either sown broadcast or by drilling, using from a peck to a half bushel of seed to the acre.

Harvesting. As Buckwheat blooms continuously the seeds do not all ripen at the same time, but it is generally harvested in the latter part of September, or the first of October, when the first seed has matured. The grain shatters very badly and great care must be taken in harvesting to prevent the loss of seed. A header or grain binder or mower with a bunching attachment have been used very successfully in harvesting the crop.

VARIETIES

Japanese. Japanese is a variety generally recommended for this section, as it is very productive and succeeds well under Northern conditions. The plant is strong and vigorous and the flowers are not as liable to be injured by the hot weather as the other varieties, and the grain is somewhat larger. **Price—See green list for prices.**

Silver Hull. The grain is of a light gray color with a thin husk, it is a heavy yielder and very early. It is preferred by the flouring mills to the other varieties because of the high proportion of flour to bran. **Price—See green list for prices.**



Golden Millet Often Produces Over Five Tons of Very Fine Hay.

Millets

Sow Nothing but True Southern Grown Seed

Millets are productive short season annuals, exceedingly useful when other crops fail. Because of this characteristic they have become known as catch crops. In the Northern States Millet is grown almost exclusively for hay, and because of this fact, the Millet seed grown in Northern climes does not produce as fine a quality of hay or seed as the Southern Millets, as

they become dwarfed, and crops grown from Northern seed do not become as tall or grow as fine as Millets grown in the South. That grown in the North, even from Southern seed, deteriorates and becomes what is known as Common Millet. The plants not only grow shorter and coarser in character, but the seed undergoes a decided change which is distinguished by experienced seedsmen.

Many unscrupulous seedsmen handle large quantities of this Northern grown seed and place it upon the market as Southern Millet. This practice enables them to make the farmer a price much below that which the reliable seedsmen can make upon the true Southern grown millet, and we wish to caution you against such a situation and emphasize to you the importance of buying your Millet seed only from reliable sources and also caution you against using Millet which has been grown in the North, for although a fair yield can be secured from this seed a crop can be more than doubled by sowing our true Southern grown Millet.

GROWING THE CROP

SOIL—Millet is particularly adapted to new land, and it is being grown under ideal condition when placed upon prairie sod or newly cleared timber land. Being a coarse feeder it prefers loose, sandy soil to clay.

SOWING—The amount of Millet to sow per acre is about three pecks for hay, and one peck when sown for seed. In the case of the broom corn Millets, the seed is considerably larger and about three pecks of seed should be used per acre. Millet may be sown any time from early spring until late summer, and it is because of this wide variation in the time of seeding that it has become so popular throughout the country.

TILLAGE—Millet, in most instances, is either sown broadcast or with a grain drill, and in such cases requires no tillage, but in some instances when grown for seed it is sown in rows and cultivated. In the case of poor and very weedy soil, this practice is to be recommended.

HARVESTING—The method of harvesting depends upon whether the Millet is to be fed green, used for hay or cut for a seed crop. It is well adapted for soiling purposes and is used as a green feed quite extensively in the East, and in some instances has been utilized as a temporary pasture. When cut for hay, which is the most common use to which Millet is put, it is usually cut just as the heads appear, although some follow the practice of allowing it to stand until the seed is ripe. No definite rules for curing the hay can be given owing to different climatic conditions.

FEEDING VALUE—Millet hay is highly nutritious and is readily eaten by all classes of live stock. As far as chemical composition is concerned it has a slight advantage over Timothy, containing a slightly higher per cent of ash protein and nitrogen free extract, which makes it more desirable for young and growing stock.

GOLDEN MILLET

This variety is very popular in the Central and Southern States. It is far superior to common Millet, both in quality and yield. It grows from four to five feet in height and often makes the splendid yield of four or five tons per acre. It is drought-resistant, and because of that characteristic has become very popular throughout the Southwest. There is no doubt that Millet should be more commonly grown, for it undoubtedly has a large field of usefulness in the Eastern States.

In these states it is customary to grow only one crop on one field, but it is possible to grow a winter crop of rye hay and a summer crop of Millet in most parts of the East, and on farms where all crops are fed, there is no doubt but that Golden Millet, if properly handled, would materially increase the income upon such farms.

It is very necessary in sowing this crop to secure Pure Southern Grown Seed. If you are going to be a little short of hay or if you are going to need some green feed to tide you over while the pastures are dry and brown, try a little genuine Golden Millet. You will be surprised at the results. Be sure you secure Southern Grown Seed. It will double the yield of the crop.

PRICES—See green list.

JAPANESE MILLET

This variety of Millet is especially adapted to wet, low grounds, and when grown under such conditions has been known to produce some phenomenal yields, producing large amounts of hay, which is readily eaten by stock. One variety has been exploited under the name of Billion Dollar Grass. It grows to an enormous height; for this reason it should be sown in drills, leaving room for cultivation. When sown in drills use about 10 pounds per acre, but if sown broadcast, sow about 15.

SIBERIAN MILLET

This variety of Millet was imported from Russia, and being somewhat earlier than the Golden Millet, it has been found to be very valuable in the Northern States. It does not grow as rank as the Golden Millet, but produces very fine quality of hay, and its early maturing qualities make it a very desirable crop to grow as a catch crop. It should be sown at the rate of thirty-five or forty pounds per acre. See price list.

HOG BROOM CORN

Because of the very short season to which it is adapted, this variety of Millet has become very popular in the far North. It is very drought-resistant. Although the stems are much larger, they are not so tall. In recent years it has gained considerable prominence in the Dakotas and adjacent states, and although it does not produce as large a yield of forage, it produces an enormous seed crop, and the seed is very desirable for poultry feeding purposes.

PEARL MILLET

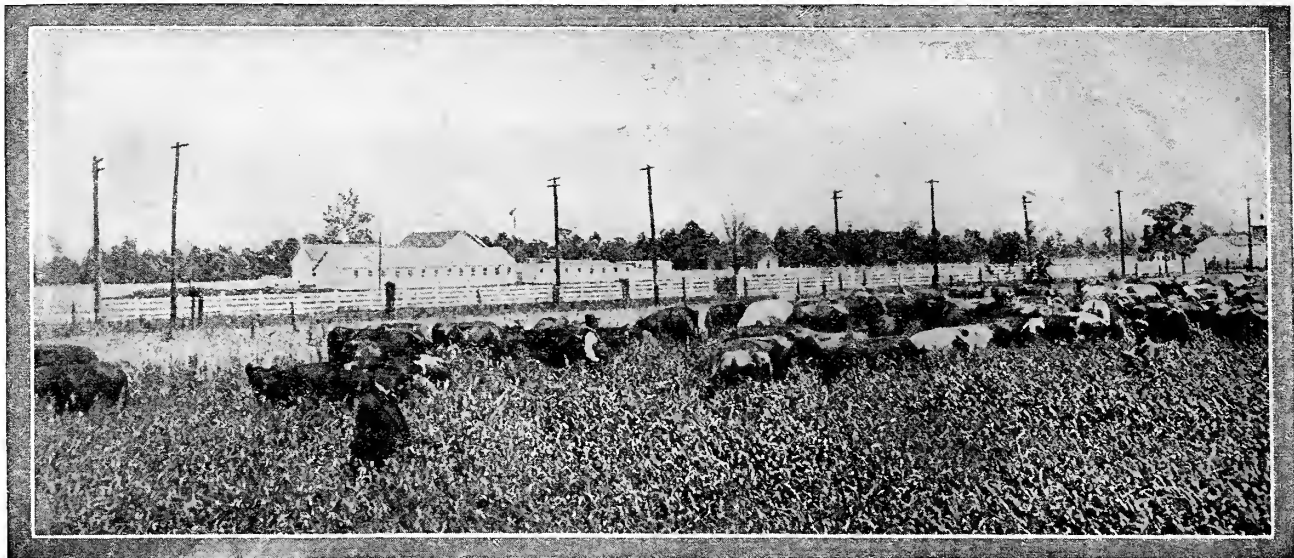
This variety of Millet grows very tall and yields an extraordinary amount of nutritious feed. It should not, however, be allowed to reach over three or four feet in height before cutting. It will then furnish continuous croppings for either soiling purposes or hay. It is a wonderful crop for use on the dairy farm. Price, 15c per lb.

COMMON OR NORTHERN MILLET

This variety of Millet does not yield as good a quality of hay or as much per acre as does the Golden Millet, but is very much cheaper in price than the true Golden Millet, and we have a lot of seed, that is as near perfect in quality as we can secure of Northern grown seed, and while we do not advocate the use of this variety, we handle it to meet the demands of the grower who wishes to secure the cheaper quality of seed. See green list for latest prices.

HUNGARIAN MILLET (Dark Seed)

This variety is somewhat earlier than the true Golden Millet and is very popular in the Eastern States, where seasons are shorter and drought is not so common as in the West. It makes large yields on good soils in most seasons. See list for prices.



Our Annual Pasture Mixture Produces an Abundance of Feed for All Classes of Live Stock.

Rape

Though only of comparatively recent introduction, Rape is now considered one of the most valuable of forage crops. If you have never tried Rape, be sure and sow some now. It is the greatest late season crop that can be grown. It may be sown any time from early spring until August, and may be sown on nearly every available soil in the United States and Canada. Rape sown in corn at the last cultivation will produce a growth of the most succulent and palatable forage of from fifteen to twenty inches in height. Rape thrives best in cool weather and will produce an abundance of forage, even after hard freezing weather commences.

Rape is especially relished by hogs and sheep and some phenomenal returns have been secured from pasturing hogs and sheep upon rape, and the Iowa Station has shown by a series of experiments that from four to six dollars per acre can be made from rape with hogs and sheep.

The Iowa Station has produced sixty bushels of oats and eighteen tons of rape, the oats and rape being sown together in the spring. The rape did not interfere with the harvesting of the oats and it afterwards produced eighteen tons per acre.

Advantages Derived From Growing a Crop of Rape

1. You can secure two crops from the same land.
2. It produces pasture weeks after all other forage plants have been killed by frost.
3. Is the greatest forage for sheep that can be grown.
4. A better finish can be put on a lot of hogs when being pastured upon Rape than by pasturing on any other crop.
5. Rape can be sown at the cost of about 30 to 40 cents per acre, and no other such an amount of green feed can be produced for as small an outlay for seed.
6. Rape is succulent, nutritious, palatable food for all stock.

Rape One of the Most Profitable Crops You Can Grow

As land becomes more and more valuable, new methods are constantly being devised which will increase the yielding power of an acre of land and yet not rob it of its fertility. Rape meets a long-felt want in this respect, for it is not only possible to secure a crop of small grain or corn upon the land, but it is also possible to grow an enormous quantity of the most palatable and succulent forage upon the same land, and by pasturing off the rape, no ill effects on the land will be caused, as practically all of the fertility is returned to the soil.

The value of a pasture for hogs has long been demonstrated as the most economical way of producing pork. Regardless of this thousands of herds of hogs throughout the corn belt are produced yearly without ever being allowed to graze for a single day. This is due to the supposed difficulty of providing good pasturage for them; but where so excellent a pasture crop as rape can be produced so abundantly and so cheaply, it is an awful waste to produce hogs in this manner.

We are making very low prices on Dwarf Essex Rape, considering the expense of importing it from Europe. The market conditions of this seed are rather unsettled abroad at present but we were very fortunate to secure our stock just when we did. Rape is a crop where the quality of the seed is important. Be sure you get our samples and prices.

Price—Postpaid, 25c per lb. Your expense, 5 lbs. or more, 18c per lb. Ask for prices on larger amounts.

Our Annual Pasture Mixture

This pasture mixture has been prepared with the idea of producing the greatest amount of green feed in the least possible time. It is especially suitable for sowing in feed lots, vacant places on the farm where other crops have failed or where you were for any other reason unable to utilize this space.

This pasture mixture meets a long felt want for a crop which will produce an abundance of green feed when the pastures are bare and brown. You may think you have plenty of pasture for all your stock and would have under normal conditions, but some unforeseen circumstance arises, as it always does at some season of the year, and you find you are short of feed. Here is where our pasture mixture will repay you many times its cost. It is the best Pasture Insurance you could have.

This mixture can be sown late in the season after a crop of small grain has been removed and will produce a lot of pasture for you during the late summer, fall and early winter months at a time when pastures are short and you are feeding your cows, pigs, horses, and sheep, high priced grain. This you can just as well save and turn into cash, and at the same time be furnishing your stock with a more nutritious feed than you possibly could from the granary or farm and send them into winter quarters in much better condition than upon high priced feed stuff.

This mixture is made up of annuals only. It is a mixture to give you quick results for one year when your pasture acreage is not large enough to carry your stock. Plow up the feed lots, sow this mixture on them and make them produce something for you during the summer while they are laying idle.

Price—Your expense, 10 lbs., 75c; 25 lbs., \$1.50; 100 lbs., \$5.00.

THE CULTURE OF RAPE AND OUR ANNUAL PASTURE MIXTURE

These two crops can be used in mulch the same way and succeed under about the same conditions and for this reason we are giving you one method of culture that we believe will cover both crops.

SOIL—These crops will grow on nearly any soil but prefer rich black loam.

PREPARATION OF THE SEED BED—No special preparation of the seed bed is needed. Rape may be sown in connection with some other crop or as a catch crop after some crop has failed or sown in the corn at the time of the last cultivation. All Annual Pasture Mixtures may also be sown in the corn or as a catch crop but most frequently it is used to secure a quick rapid growing pasture on some farm where there is an insufficient supply of pasture grasses.

SOWING—These crops may be sown any time from early spring until mid summer and while rape only requires from 5 to 8 pounds of seed per acre we advocate sowing 40 to 50 pounds of the Annual Pasture Mixture. When seeded with these amounts of seed the land furnishes an enormous amount of pasture and a cheap lot of feed can be grown. These crops are especially adapted for pasturing sheep and hogs and we know of no way by which as large an amount of pasture can be secured in a short time as by using either our Annual Pasture Mixture or Rape.

Potatoes

Our stock of seed Potatoes is grown almost exclusively in the Red River Valley of Minnesota and North Dakota. This district produces the best seed Potatoes which can be grown anywhere in the world. The big Potato growers of the United States have discovered that they can do nothing which will pay them better than to secure seed Potatoes from this district. These Northern grown seed Potatoes seem to have the life, quality, vigor and growth necessary to the production of a high class crop of tubers. A crop grown from Northern grown seed will outyield a crop grown from seed secured from any other section.

How Our Seed Potatoes Are Grown and Handled

We contract with the large growers in the North to grow so many acres of Potatoes for us, especially for seed purposes. This seed is clean, healthy and free from scab, and we in this way secure the best quality of seed Potatoes which can be produced. In the fall we ship in several cars to our frost-proof warehouse in order to be able to supply the early Southern trade, but the big bulk of our Potatoes are left in the North, where, being stored as they are under ideal conditions, they reach us in March, solid and dormant, and in much better condition to send out to our customers than if we shipped them down from the North early in the season, for it seems that Potatoes not only grow to the highest state of perfection in these far Northern States, and are able to transmit this quality to the succeeding crops, but they keep much better in the earthen cellars, especially constructed for the purpose than in any artificial warehouse which we might construct from stone, brick, and concrete.

All Our Seed Carefully Hand Sorted

All our seed Potatoes are carefully hand sorted from carefully selected stock, such as you will not secure from any other source, and we feel that we haven't the words at our command to place before you in language strong enough to really do justice to the exceptional quality of seed Potatoes which we are able to offer you.

We Are Not Introducing Questionable Varieties

All of the seed Potatoes which we are offering you are standard, well known varieties, and we are not placing before you some new and unheard of sports which have made some phenomenal yields or grown to an enormous size. We are simply placing before you for your careful consideration the best lot of Northern grown seed Potatoes of old, well known, reliable varieties, which we have been able to produce under ideal conditions of soil, climate and tillage. I believe we are able to offer you the greatest values in Northern grown seed Potatoes which you have ever been offered.

Your neighbors will need some seed potatoes. You can save on the price and freight by including their orders with yours. We handle the well tried standard varieties and have reliable stock for every locality. Find out the number of bushels and the variety needed in all and get in touch with us for special prices.

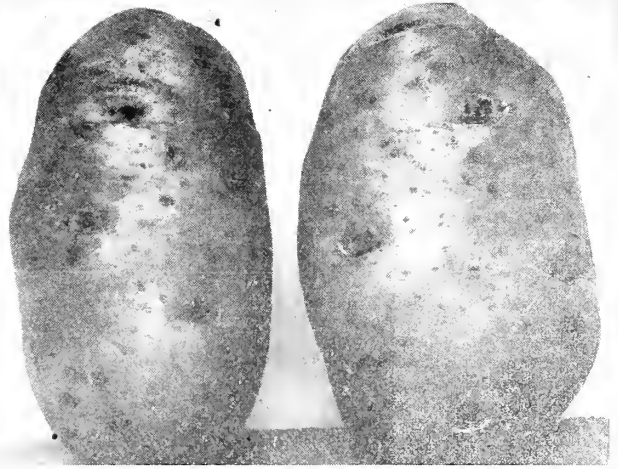
Many farmers have to buy their eating potatoes during many seasons and some fail to dig but few more than they plant. This is due to poor seed. Many farmers plant the culls and small ones left from their eating stock. What they need is some of our Northern grown seed potatoes for a good yield.

Date of Shipment

While we ship Potatoes to you any time you order them shipped, it is very risky to have them shipped before April 1st, as we do not take the risk of their freezing until that time, but if you wish them shipped sooner and you take the risk we will make shipment for you. We ship large quantities of Potatoes by express and small quantities by mail before this time, but we do not take the risk of their freezing by freight until we are confident the weather is safe, so when no special instructions are given to the contrary we hold your order until in our judgment there will be no danger from freezing in transit.

A Word About Prices

At the time of going to press the market is in a very unsettled condition and it is an impossibility to accurately estimate the values, but at the time of mailing we will enclose you our green list, which will give you the latest quotations. To those who order seed Potatoes in large quantities take the matter up with us before ordering so that we can keep you posted on our best prices. Kindly mention the number of bushels and variety wanted when inquiring for special prices.



Early Ohios Are a Good Variety of Potatoes to Grow.

Varieties

RED RIVER EARLY OHIO SEED POTATOES

The growers in the Red River Valley of North Dakota and Minnesota have specialized on the Early Ohio for many years, and they have developed it to the highest state of perfection. No finer seed can be found anywhere than this Red River grown Early Ohio, for the growers in that district have put their best efforts forth and by careful selection of the seed stock, careful methods of cultivation, and the experience in handling the crop which, following the business for a generation has made possible. They have produced a variety which is undoubtedly without an equal for smoothness, uniformity and typical shape.

The Early Ohio Potato is so generally known that it requires no extended description. It is more popular than any other variety, as shown by the greater number of sales for seed stock. The Early Ohio can most always be depended upon to give a satisfactory yield, for even in localities where climatic conditions are not suited for the production of a late season crop of Potatoes, the Early Ohio can be planted early and will develop before the hot, dry weather begins. Taking the country over, there is no Potato which meets with such universal satisfaction as does the Early Ohio, and this extra selected seed stock which we are offering you is the best that can be secured. It will ripen a week earlier than your home grown Early Ohios, and will produce a much larger yield, of smoother, larger-sized Potatoes. This seed stock is free from scab, dry rot and other diseases so prevalent among Potatoes grown farther south. Every bushel is backed by our Absolute Guarantee and if not perfectly satisfactory return them and your money is waiting for you.

WHITE OHIO POTATOES

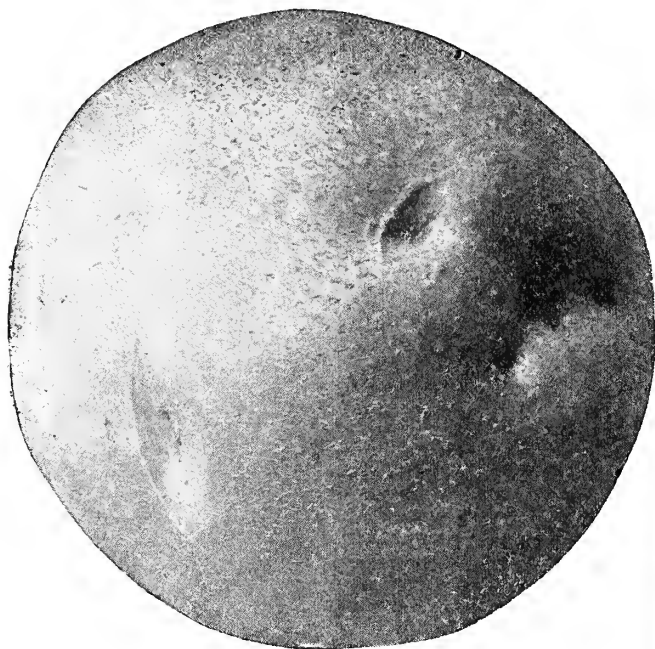
This is a seedling or sport of the Red River Ohio. It is very similar in every way, except that it is different in color, being pure white with pink eyes. This variety is not grown as extensively as the Red River Ohio, and we only have a limited stock to offer you, so kindly place your order at as early a date as possible, as there will undoubtedly be orders received that we will be unable to fill, as this new strain is becoming very popular.

EARLY SIX WEEKS

This Potato is a dark, brownish pink in color, is of medium size, oval and slightly flattened in shape, skin is smooth with a few netted spots at one end, eyes of medium size and shallow. This variety has proven very popular, especially for the South, where it necessitates the production of a Potato which will develop early in the season and escape the dry, hot weather. Because of the vigorous growth which it makes, and the earliness with which it matures, the Early Six Weeks has proven a very popular Potato for the early maturing qualities, and we have some exceptionally nice Potatoes of this variety to offer you.

We are unable to quote firm prices. See price list enclosed. Good for month in which issued.

Ask for our Free Booklet on "What to do for Your Lawn."



EARLY ROSE

This variety has been a great favorite for many years, and many growers claim it has never been excelled in quantity and productiveness. It cooks up mealy, and is of a very fine flavor. It is light pink in color, rather elongated in shape and of good size. This is one of the earliest varieties of Potatoes that can be grown, and we wish to recommend it for your early season crop. Grow some of these fine tubers and have new potatoes while your friends are eating old ones. Our seed stock has been grown in the Red River Valley, and we feel sure that we are in a position to offer you some great values in this variety. See Green List for prices.

THE IRISH COBBLER

The Irish Cobbler is a medium early maturing Potato. They are increasing in popularity among the best Potato growers, especially among market gardeners. This variety is grown very extensively throughout the South and in some sections is being grown to the exclusion of all other varieties. When this variety was first introduced, no special claim was made for it as an early maturing variety, and it was rather regarded as the main season crop. They have, however, on account of being grown extensively in the North, and because of the fact that the seed stock has been selected for the purpose in view of promoting its medium early maturing qualities, until today it may be considered as one of the medium early maturing varieties.

Description—The Irish Cobbler is round and uniform in size and shape, and of a creamy white color. The flesh is white and of fine quality and flavor. It is especially noted for its heavy yielding qualities.

RURAL NEW YORKER

Rural New Yorker is the standard main season crop. It is very distinct and a valuable late crop variety. It makes a heavy, healthy, vigorous growth and attains a very large size. The tubers are very solid, and it is a very heavy yielder. It is quite drought resistant, and for a main season crop and one which will keep until new Potatoes come, it cannot be beaten. This is a variety that will produce a big yield for you.

RED ROSE

Red Rose is a medium late variety, elongated in shape and very large and is an excellent yielder. It is a great Potato for localities with a short season. It is very hardy, making a strong, vigorous growth. It is not subject to blight or scab. For a Potato maturing rather early, and yet not an early Potato we can most heartily recommend the Red Rose, for it is a high class variety in every respect.

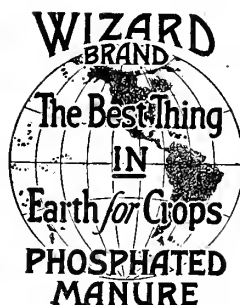
POTATO EYES BY MAIL

To those who only grow a small lot of Potatoes, a very convenient way of securing seed without paying freight or express charges on small quantities is to secure the Potato eyes. We are offering this advantage of your being able to secure the Potato eyes without having any express or freight charges to pay.

In planting in hills, allow three or four eyes to each hill; if in rows, drop eyes about eight or ten inches apart. These eyes are packed in boxes, which have been plainly labeled, and they mean a great saving to our customers who are so far away that their express and freight rate would be an item of expense.

PRICE—Eyes of any variety listed, 25 eyes, 30c; 50 eyes, 50c; 100 eyes, \$1.00; 300 eyes, \$2.50; 500 eyes, \$4.00. Special —100 eyes of 3 varieties, \$2.50. All postpaid anywhere in the United States.

We Recommend Wizard Brand Phosphated Manure Because It's a Real Fertilizer



Wizard Brand Phosphated Manure is a combination of high quality Acid Phosphate and specially prepared Stock Yards Manures dried and sterilized by a direct heat process, screened and uniformly ground or pulverized. There is not a pound of filler or make-weight stuff in Wizard Brand. It drills nicely and makes a big crop because it's a common-sense, honest fertilizer that gives the soil what it needs to make things grow.

The best Stock Yard manures are reduced by our special process approximately 10 tons to 1. This Concentrated Manure is then mixed with high quality Phosphate in such proportion that there shall be the

equivalent of 5½ tons of ordinary barnyard manure (minus the water) in every ton of Wizard Brand. This Concentrated Phosphate Manure is in such shape as will permit application direct to the plants where every atom is used to best advantage.

Wizard Brand Phosphated Manure is ten times stronger than ordinary barn-yard manure and will produce the highest quality of grain, cotton, fruit or vegetables and leave your soil in better shape for the crops to come.

TESTIMONIALS

We used between 250 and 400 lbs. per acre on 75 acres of orchard, and we think it increased our crop at least one-third, and we consider Phosphated Manure equal to if not superior to the rough stock yards manure for speedy results. Wizard Brand has much in its favor, especially for those who are several miles from the railroad, as it is much easier to haul and apply than the raw rough manure. Bentonville, Ark. DORA S. WOODRUFF.

We used Wizard Brand on corn and think it is the best fertilizer we have ever used. It increased our crop approximately 15 bu. per acre and all during the growing season the corn seemed to have more push. Cabool, Mo. AVANDALE STOCK FARM.

ANALYSIS OF PHOSPHATE MANURE

Nitrogen	82%
Equals Ammonia	1.00%
Phosphorus Acid available	9.00%
Potash	1.00%

See Green List for Prices.



Many growers say "Oh we can get a catch in these parts without inoculating." This may be true, but what kind of a catch?

The modern farmer says "I inoculate because I want a better catch. I want plenty of those little nodules or lumps on every root. The more the better."

"Nodules are plant food (nitrogen). They mean a well fed legume plant."

"Well nourished legume plants mean less WINTER KILLING. They can put up a good fight against pests because they are healthy and strong. They have a deeper root system."

"More nodules mean a more even stand instead of bare spots all through the field, therefore I get a better yield and that is what I am after."

"The more nodules I plow under, the more plant food for the crop in rotation. I do not rob my soil of nitrogen. I add to it."

PRICE

Bushel size can	\$1.00
One-half bushel size55
Garden size15

Be sure and mention crop you wish to inoculate.

Ask for our Free Booklet on "What to do for Your Lawn."

Bank References and Recommendations from Folks Who Know Something About Us

Our Banker Tells You What You May Depend on When You Send Your Order to Us

Central Manufacturing District Bank

Chicago, Ill.

To Whom It May Concern:

We take pleasure in stating that the American Mutual Seed Company are valued depositors of this bank. We consider them thoroughly responsible and amply able to fill orders entrusted to them in a satisfactory way. We are sure that anyone dealing with this company will be treated in a courteous, business-like manner.

Yours very truly,
FRANK L. WEBB, Cashier.

Our Promptness a Credit to Us Says Another Customer

High Street, Kennebunk, Me., April 11, 1921.

Gentlemen:

I am well pleased with my order which arrived some time ago. Your promptness is a credit to you.

FRANK L. LITTLEFREID.

Shows Seed to Neighbors and Gets Other Customers for Us

Harrisville, N. Y., Route 1, March 26, 1921.

Dear Sir:

I am writing you these few lines to say that my seed grain order arrived safely and I am much pleased with both the seeds and the measure. I am showing this seed to all my friends I am so well pleased with it, and I expect to get you some customers, as I will remain one myself.

CHARLES MEALUS.

Alsike and Timothy Pleases Him

Roulette, Pa., May 23d, 1921.

Dear Sirs:

Timothy and Alsike seed arrived in good shape and looks fine. I wish to thank you for your honesty in sending extra seed because prices had dropped. I like to deal with people who give me a square deal. Enclosed find another order for more seed.

G. V. SHIPLEY.

Our Timothy Always Gives Good Results

Wolf Creek, Mont., May 24, 1921.

Dear Sirs:

The Timothy came all right and it is all that you have recommended it to be. It is coming up fine and dandy and I am well pleased with it. I will do all I can to advertise it to my neighbors.

J. F. SEBELIST.

Make Two Shipments and Everything Satisfactory

Livermore Falls, Me., April 5, 1921.

Dear Sirs:

We have received both our orders of seed and it reached here in good order and is satisfactory in every way. Thank you very much for your prompt shipment.

H. E. OSGOOD.

Divides Our Seed With His Neighbor and Adds Another Satisfied Customer

Cheboygan, Mich., April 8, 1921.

Dear Sirs:

I received the Sweet Clover seed all O. K. and am well pleased with it and it is the best I have ever seen. I sold part of it a neighbor because he liked it so well. You can certainly look for more orders from me.

GERALD WHEELACH.

Says All Our Seeds Are True to Name

Lexington, Tenn., March 31, 1921.

Gentlemen:

I cannot refrain from extending to you many thanks for your nice treatment. Your seeds are all of high standard and true variety.

T. L. HOLMES.

Gives Our Seed Guide to His Neighbor

Elmira, N. Y., April 1, 1921.

Dear Sirs:

The grass and grain, also the Cyclone Seeder have all come in good shape. I am well pleased with all of them. I have passed along the Seed Guide you sent me to a neighbor.

T. B. DU BOIS.

Ask for our Free Booklet on "What to do for Your Lawn."

Sends Us Too Much Money

Punxsutawney, Pa., March 30, 1921.

Dear Sirs:

Received your letter with copy of order and prices and check for the amount of \$3.75. I thank you for correcting mistake. Also received complete shipment and found everything O. K. Thanking you for your kindness.

SAMUEL COUCH.

New Alberta Oats Yields 60 Bushels Per Acre

Ridgway, Pa., Box No. 162,

February 26, 1921.

Sirs:

I was well pleased with the two bushels of seed oats "New Albertas" which I purchased from you last spring. They produced forty-five bushels by measure and sixty bushels by weight, a far better crop than I know of in our section.

JOHN BURNS.

His Neighbors Send for Over \$1,000 Worth of Seed

Marysville, O., Route No. 2, March 21, 1921.

Dear Sirs:

Received my shipment of seed in good condition and am well pleased with it. I had my neighbors send for some and they sent you an order for over \$1,000.00 worth.

JOHN L. MADER.

Places Club Order and All Are Well Pleased

Slippery Rock, Pa., March 29, 1921.

Dear Sirs:

I should have written you long ago to let you know that I received the order in good shape and every one who bought the seed was well pleased with it. They all have a good stand of grass. Thanking you for your kindness, prompt shipment and seed, I remain

H. M. ORR.

Recommends Our Seed to His Friends

Onekama, Mich. Box 135.

April 9, 1921.

Dear Sirs:

I am writing you to say that I received the seed all O. K. and in fine condition. I like your seed very much and will recommend it to all my friends, and when in need of more seed will send to you for it.

L. M. JOHANSON.

Pleased with the Hulless Barley

Covington, Ohio. R. No. 1, Box 3.

March 22, 1921.

Gentlemen:

I received my White Hulless Barley today and am well pleased with it.

JOSEPH F. MARTIN.

Thanks Us for Filling His Order so Promptly

Linesville, Pa., March 21, 1921.

Gentlemen:

I have received your seed sent to me per express on the 12th inst. and I desire to thank you for being so prompt in filling my order.

GEORGE STANTON.

Well Pleased and Sending Another Order

Ravine, Pa., March 21, 1921.

Dear Sirs:

I received my seeds and am well pleased with it. I will soon send another order.

CHARLES MARTZ.

Ships Seed to Another Party Who Is Well Pleased

Milford, O., March 21, 1921.

Gentlemen:

I am pleased to say that shipment has been received and Mr. Robinett reports same O. K. and full weight. Thanking you kindly for past favors, I am as ever a friend to the American Mutual Seed Co.

GEO. RANDALL.

Ask for our Free Booklet on "What to do for Your Lawn."

Suggestions for Ordering

Use the Order Sheet and printed envelopes. Will be pleased to furnish you extra sheets at your request.

Always Keep Copy of Order—Sign your name plainly and be sure to give your post office, county and state. If your freight or express office has a different name, do not fail to give it also.

Terms Cash—We are reliable; you can send your remittance by P. O. order, Bank Draft, Express Order or Registered Letter. If not convenient to send Drafts or Money Order, send your personal check, but the banks here in Chicago charge us 10 cents for collection, so if you will kindly add this amount for exchange when sending in personal checks it will be appreciated.

Seeds by Freight or Express—We secure for you the lowest freight or express rate, and you pay the charges on receipt of the goods. We have big advantages in saving our customers money on transportation charges when goods are shipped. We send shipping notice and bill of lading of freight shipments, signed by the agent, showing the goods were delivered in good condition.

Prepaid Railroad Stations—If your own station has no agent and is merely a milk or flag station, it is important that shipments be sent to the nearest station that has an agent. This will protect you from delay. Shipments are held when billed to a prepaid station unless freight is fully prepaid and should we find your station a prepaid point we reserve the right to bill shipment to the nearest station that has an agent. If it is a great convenience for you to have shipment sent to prepaid station, and you do not know the exact amount of freight to include with your remittance, if you guarantee the transportation charges, we will prepay the freight and mail you a bill for the same. We would urge you not to have shipments sent to prepaid stations, as the railroad company is not liable after shipment has been taken from the train.

Important—It sometimes happens, though very seldom, that an order is lost coming to us; or the goods in going to the customer. If you do not hear from us in a reasonable length of time after ordering, send us a duplicate order, naming the date on which the order was sent, the amount of money enclosed and in what form remittance was sent. We will then investigate the matter and if we find that the order has not already been filled, the duplicate order will go forward at once.

Special Express Rates—Seeds of all kinds take a much lower express rate than regular merchandise. The charge on seeds is one-fourth less than the charge on other merchandise. Express does not have to be prepaid as the amount is the same whether paid at this end or at your express office. You can have shipments up to 30 pounds or 40 pounds sent as cheaply by express as freight with a few exceptions. Seeds are carried at Second Class Rate. If your shipment consists of several bags, you are entitled to the same rate on the aggregate weight, just the same as if it was made in one bag. Unless we notify you, we always deliver the entire shipment to the express company at the same time. Call this matter to the attention of your express agent.

Substitution—Our rule is not to substitute unless we are given permission to do so. We would suggest, however, that customers name a second choice, in case we are out of the variety ordered. We are amply provided with large quantities of everything on the list, but may run short on some before the season is over, as the demand for certain articles is frequently larger than we could anticipate.

WE GUARANTEE SAFE ARRIVAL

We fill all orders promptly and guarantee safe arrival of all shipments. If you do not specify which way to send your seeds, we use our best judgment. Sometimes an express order is lost, and in that case we file claim for our customer and refund the money or refill the order if desired. Be sure and have the agent make a notation on paid expense bill for the amount of the loss or damage, and mail the same to us.

FREIGHT RATES

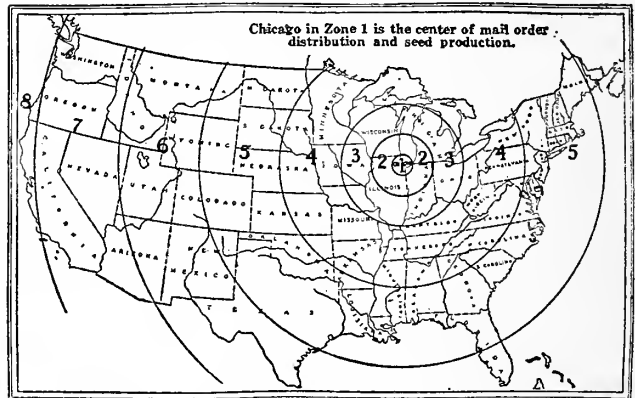
Don't let freight charges worry you, because whether you buy from us or your home dealer, you pay the freight and you pay no more than your local merchant. Seeds and grain are carried at third and fourth class rates, which are much cheaper than merchandise, so don't let a little freight stand in the way of your ordering. Up to 100 pounds you pay the freight for 100 pounds, whether you have 10 pounds or 100 pounds. Over 100 pounds, you pay only for what you get. For example: If 100 pounds cost you 60c for freight, 120 pounds would cost you only 72c. If your order does not amount to 100 pounds, try to induce some of your neighbors to order with you.

PARCEL POST INFORMATION

If you want your order to come by Parcel Post always include the postage charges with your remittance. The map on this page shows you what one your post office is in from Chicago. If in doubt, ask your postmaster or carrier. The table below gives the charges on various weights to the different parcel post zones. In addition to the rate below, the war revenue bill requires a tax of 1c for each twenty-five cents of postage or fraction thereof, on packages bearing 25c or more postage.

TABLE OF RATES FOR PARCEL POST SHIPMENTS

Weights of Packages	1st Zone	2	3	4	5	6	7	8
1 pound	.05	.05	.06	.07	.08	.09	.11	.12
5 "	.09	.09	.14	.23	.32	.41	.51	.60
10 "	.14	.14	.24	.43	.62	.81	1.10	1.20
15 "	.19	.19	.34	.63	.92	1.21	1.51	1.80
20 "	.24	.24	.44	.83	1.22	1.61	2.01	2.40
25 "	.29	.29	.54	1.03	1.52	2.01	2.51	3.00
30 "	.34	.34	.64	1.23	1.82	2.41	3.01	3.60
35 "	.39	.39	.74	1.43	2.12	2.81	3.51	4.20
40 "	.44	.44	.84	1.63	2.42	3.21	4.01	4.80
45 "	.49	.49	.94	1.83	2.72	3.61	4.51	4.60
50 "	.54	.54	1.04	2.03	3.02	4.01	5.01	6.00



Ask for our Free Booklet on "What to do for Your Lawn."

CAUTION--ORDER EARLY

American Mutual Seed Co.'s Planter's Reference Table and Index

	Quantity Per Acre	Lbs. Per Bu.	Page
Alfalfa	12 to 15 lbs.	60	10-12
Alyke	6 to 8 lbs.	60	9
Alyke and Timothy	12 to 15 lbs.	45	24
Barley	2 to 2½ bu.	48	33
Buckwheat	½ bu.	32	42
Blue Grass (Kentucky)	2 bu.	14	27
Blue Grass (Canadian)	2 bu.	14	27
Blue Grass (English)		24	27
Bermuda Grass	5 to 6 lbs.	27	27
Billion Dollar Grass	12 to 15 lbs.	23	23
Broom Corn	12 lbs.	14	26
Broom Corn	8 to 10 lbs.	46	42
Clover, Med. Red and Mammoth	8 to 10 lbs.	60	7-8
Clover, Crimson	10 to 15 lbs.	60	8
Clover, White or Dutch	6 lbs.	60	8
Clover, Alyke and Timothy	12 to 15 lbs.	45	25
Clover and Timothy, Mixed	12 to 15 lbs.	45	25
Corn	1 bu. 6 acres	56	36-39
Cane, Broadcast	1 to 1½ bu.	50	41
Cow Peas	1 to 2 bu.	60	19
Canadian Field Peas	1½ to 2 bu.	60	20
English Rye Grass	2½ bu.	24	27
Emmer or Speltz	1½ to 2 bu.	40	34
Flax	½ bu.	56	41
Feterita	8 lbs.	50	41
Gold Mine Hog Producer	10 to 15 lbs.	23	23
Italian Rye Grass	2 bu.	14	27
Jerusalem Corn, Broadcast	1 to 1½ bu.	60	41
Kaffir Corn, Broadcast	1½ bu.	50	41
Kaffir Corn, Drills	6 to 8 lbs.	50	41

	Quantity Per Acre	Lbs. Per Bu.	Page
Lawn Grass Mixtures	2 to 5 lbs.		28
Lespedeza	15 lbs.	24	8
Meadow Fescue	1 bu.	24	27
Millet, Golden and Hog	1 to 3 pks.	50	43
Millet, Hungarian	1 to 3 pks.	48	43
Millet, Japanese	12 to 15 lbs.	30	43
Milo Maize, Broadcast	1½ bu.	50	42
Milo Maize, Drills	6 to 8 lbs.	50	42
Meadow Mixture	1 to 2 bu.	32	29-32
Oats	2½ to 3½ bu.	14	26
Orchard Grass	3 to 4 bu.	50	42
Pencillaria, in Drills	30 to 40 lbs.	50	44
Pasture Mixture, Annual	15 to 20 lbs.	28	28
Pasture Mixture, Permanent	13 bu.	60	45-46
Potatoes	2 qts.	56	39
Popcorn	8 to 10 lbs.	24	26
Red Top (Solid Seed)	5 to 6 lbs.	50	44
Rape	1½ bu.	56	35
Rye	1 to 1½ pks.	60	17-18
Soy Beans, in Hills	4 lbs.	50	40
Sudan Grass, in Rows	12 to 15 lbs.	50	40
Sudan Grass, in Drills	12 to 15 lbs.	60	14-16
Sweet Clover (hulled)	30 lbs.	30	14-16
Sweet Clover (unhulled)	1 bu. 6 acres	39	39
Sweet Corn, Drills	2 bu.	46	39
Sweet Corn, Broadcast	10 to 12 lbs.	45	21-22
Timothy	2 to 2½ bu.	10	27
Tall Meadow Oat Grass	1 to 2½ bu.	20	20
Vetch		60	35
Wheat			

I Would Not Farm Without Sweet Clover —the Cheapest Seeding You Can Make

So Says Mr. Summers, Manager and Farmer

It certainly is the cheapest pasture insurance known. It does its best during the hot dry summer months when other pastures are dry and brown. You cannot beat Sweet Clover for pasture. It will grow in places too wet for Clover or Alfalfa and on gravelly hill sides that are so deficient in organic matter that they will not grow anything else. Sweet Clover is one crop that I feel I cannot urge you too strongly to grow. It is one crop that I would not farm without.

Do Not Delay Buying Your Sweet Clover Seed

We have made some exceptionally good contracts for Sweet Clover Seed and we honestly believe that the quicker you place your order the more money you will save on your seed. While there is a good crop of seed we feel that there will be an exceptionally heavy demand and we want you to get in and get your seed while we can give you the advantage of our early contracts.

At this time of going to press it is too early to tell just what the price of Sweet Clover Seed will be, but it is our opinion that it will be cheap this year. The crop is far enough along to tell that we will have a good seed crop, and you should not fail to buy in a good supply of seed.

It is the Greatest Crop of the Modern Farm

No other crop has made as many friends in the last few years as has Sweet Clover. Farmers write us from all sections of the country telling us of the phenomenal results they have secured from growing Sweet Clover. The farmers here in Northern Illinois are about the most enthusiastic lot of fellows you ever listened to regarding it. Some of them get almost as enthusiastic over it as they do over their favorite candidate during Presidential Election. One of them was in the office the other day and told me that during the hot, dry weather this summer he was the only one in the neighborhood that did not have to feed his cows. He said his cows were looking better than they had any time this year and said he was getting the biggest milk yield per cow of anyone in the neighborhood and had not fed a bite of grain this summer. He even requested that we send him a lot of our Seed Guides on the growing



of Sweet Clover as all of the neighbors intended to put out some next year and wanted full instructions on how to sow it.

It seems so easy to grow, however, that it needs no set rule for growing it. Our advice is to handle it as you would any other clover but put on about 15 pounds of seed per acre. If your land is sour put in some lime. As a general thing very few of our customers fail to get a stand of Sweet Clover, but when they do we are usually able to trace it to a sour soil.

If I could only take you through a field of corn I was in a few weeks ago there would be no doubt about your growing this crop. It certainly puts the land in shape for corn and I know of no crop that will produce the feed that Sweet Clover will while doing it. I would not farm without Sweet Clover, the cheapest seeding you can make. SEE GREEN LIST FOR PRICES.

J. F. SUMMERS,
Manager and Farmer.



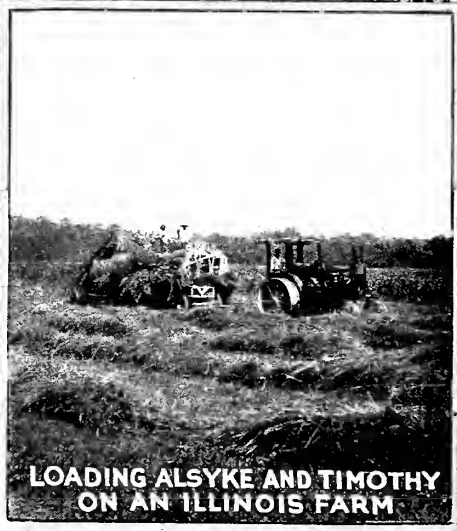
A GOOD CROP OF SWEET CLOVER
THE GREAT SOIL BUILDER



ALFALFA THE GREAT MONEY
MAKING HAY CROP



ALSYKE AND TIMOTHY MAKING 4 TONS PER ACRE



LOADING ALSYKE AND TIMOTHY
ON AN ILLINOIS FARM



SWEET CLOVER PRODUCES
BIG CROPS OF HAY



A BIG CROP OF MAMMOTH CLOVER
ON THE FARM OF ONE OF OUR CUSTOMERS

ALSYKE AND TIMOTHY PRODUCE WONDERFUL CROPS OF BOTH HAY AND PASTURE